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ABSTRACT

This mammoth document consists of a random series of project reports and proposals from the Puerto Rican Department of Education. Each report is a distinct entity, and lists the school districts involved in the project under discussion. The papers all focus on those aspects of strategies and services which will help students to remain in school, help students to acquire language and work skills which will make them employable, and help them learn about educational and vocational opportunities. While some reports contain objectives and recommendations, most reports are primarily collections of data, statistics, and forms. Some of the areas covered by reports are: (1) guidance and counseling program evaluation; (2) diagnostic centers; (3) rural pupils; (4) closed circuit TV; (4) basic reading and math skills; (5) learning resources; (6) sports; (7) materials for handicapped; and (8) educational opportunity centers. (CJ)

ED 092816

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Education, San Juan, Puerto Rico.

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GUIDANCE AND COUNSELING PROGRAM

EVALUATION REPORT

PROJECT # 1

1

REPORT ON WORK PERFORMED IN TITLE III PROJECTS OF THE COUNSELING PROGRAM - ELEMENTARY LEVELS

Name of School	School District	Enrollment					
		Elementary		Junior High		Senior High	
		U	R	U	R	U	R
Charles T. Irizarry	Mayaguez	374					
Comunidad Rural Canas	Ponce		1,191				
Pajuil Second Unit	Hatillo		629				
Palmarejo Second Unit	Lajas		425				
Nemesio Canales	Río Piedras	575					
Horace Mann	Comerío	1,241					
	TOTAL ------	2,190	2,245	= 4,435			

		Elementary		Junior High		Senior High	
		U	R	U	R	U	R
No. of teachers - 146		79	67				
	TOTAL	146					

1. Pupils with achievement problems

a.	Pupils with problems in academic achievement	1,016
b.	Pupils whose academic achievement improved after receiving counseling services	501

2. Use of general ability test results and school achievement

a.	Pupils identified as having a percentile of 75 or more on the general ability test	472
b.	Pupils with a percentile of 85 or more on the general ability test who were doing school work of 2.0 or more	281
c.	Pupils with a percentile of 75 on general ability test but having a school average less than 2.00, who were in the counseling program and improved their academic achievement	97

d. Activities to help pupils performing below ability

		No. pupils
1.	Group counseling on study habits	49
2.	Orientation to parents on how to help children study	52
3.	Individual counseling to pupils	193
4.	Placement in special groups for teaching reading skills	59
5.	Study of factors affecting the pupil	23

e. Activities carried out with talented pupils

1.	Study of records for giving scholarships	325
2.	Explain to parents the work being done and their vocational interest	73
3.	Trips to occupational centers	450
4.	Act as tutors to slow-learner pupils	20
5.	Seminar on leadership	92
6.	Orientation on relationship between academic achievement and their occupational plans	50

3. Pupils who received personal counseling services	1,607
a. pupils who improved their concept of themselves	574
b. pupils who learned to make decisions	602
c. pupils who successfully autoevaluated themselves and learned their abilities and interests	678

4. Identification of and attention to needs of the pupils

    a. Needs of elementary school pupils

    - Health services
    - School adjustment
    - Orientation on absences
    - Parent-child relations
    - Study habits
    - Activities
    - Better understanding by parents and teachers
    - Good relations among pupils
    - Offer psychological services
    - Economic help
    - Provide school activities in line with capacity of the child
    - Individual help in different subjects
    - Approach to better achievement
    - Relate themselves to the world of work

    b. Activities carried out to meet these needs

    - Referral to special services
    - Interviews with parents of pupils having family problems
    - Talk on how to study (158 st)
    - Intensive individual help
    - Interviews with teachers
    - Trips to occupational centers
    - Visit to vocational centers
    - Study of identification of needs
    - Case-conference
    - Home visits
    - Re-grouping
    - Orientation on occupations.

c. These needs were identified with the following techniques:

- Study of cumulative record
- Questionnaire: Know yourself
- Psychological evaluations
- Consultations
- Correlation profile
- Observations
- Studies
- Sociogram

d. Training to teachers to deal with pupil needs.

Topics discussed	No. teachers
1. Basic needs of pupils in elementary school	76
2. Interpretation of normalized test results	48
3. Techniques for knowledge of the child	
a) autobiography	17
b) correlation profile	31
c) technique of observation	46
d) sociogram	13
e) cumulative record	48
4. Discussion of concept of "Career Education"	60
5. Stages in growth of the child	68
- Teachers who improved in their attitude toward pupil behavior	96 = 65%
- Teachers who improved their attitude toward participation in the social and personal development of the pupil	88 = 60%

e. Activities carried out with parents 38

Training Topics	No. parents
Services offered by the school	116
Stages of growth of the child	175
Film "Las manos del hombre"	80
Project "Career Education"	92
Role of parent in occupational selection of his child	39
Orientation on drugs	50

Individual Help Topics	No. parents
Achievement	253
Better knowledge of child	31
Occupational information	29
Interpretation of normalized test results	102
Attendance	142
Economic situation	42
How to help your child	287

- Parents who took part in training	709
- Parents who succeeded in understanding their children better in terms of ability and interest	376
- Parents who successfully understood better the stages of growth in the child 7 - 12 years old	444

5. Identification of and attention to pupil problems

a. Problems found in pupils of the school

Health
Reading proficiency
School adjustment
Home problems
Lack of interest in school
Ignorance of occupations in the community
Attendance
Economic problems
Ignorance of own physical development

b. These problems were identified using the following techniques:

Techniques	No. pupils involved
Selection Test	674
Pupil records	709
Diagnostic test	374
Psychometric tests	15
Interviews	501
Observations	20
Questionnaire - "Why we failed"	46
Correlation profile	340

c. Activities carried out with teachers to take care of these problems

Activities	No. teachers involved
Interviews	130
Meetings to analyze and prepare a plan of work to take care of these situations	141
Orientation of on referral to special services	35
Film "The Eye of the Beholder"	34
Orientation on the world of work	14
Home visits	4
School clothing	12

d. Number of teachers outstanding in their attention to these problems 59

e. Activities carried out with parents to take care of these problems

Topics discussed	No. parents
Stages in growth of the child	286
Attendance	250
Achievement	264
Orientation on drugs	50
Understanding of the pupil	67
Importance of the pupil's staying school until graduation	92
Knowledge of the child	305

f. Number of parents who actively participated in taking care of these problems 557

g. Success observed after giving attention to these problems

1. Change in attitudes between parent and children
2. More and better use of counseling services
3. Improvement in school attendance
4. Better achievement
5. Request for counseling services
6. Improved discipline
7. Pupils taken care of in their problems

h. How has the counseling program contributed to establishing and maintaining in the school a helpful climate for development of process, teaching and learning (talks, workshops, youth organizations, others)

1. Interpretation of test results of pupils through correlation studies has been used in the teaching
2. It has helped the teachers to have an in-depth understanding of the child and to use it in working with the pupils
3. It identified pupils with learning problems in the school and improved their learning
4. Talks were given on how to improve study habits
5. It encouraged pupil grouping according to their needs and interests
6. Training seminars for parents were held
7. Scouting was emphasized in pupil organizations
8. Community resources were brought together and used to offer better services to the pupils
9. Relations between the school, parents and general community were strengthened

GUIDANCE AND COUNSELING PROGRAM

EVALUATION REPORT

PROJECT # 2

REPORT ON WORK CARRIED OUT IN TITLE III PROJECTS
COUNSELING PROGRAM - JUNIOR HIGH LEVEL
PROJECT #2

Counselors:

Pura Wiscobitch
Gloria Martínez
Ricardo Ferrandini
Zelideth Luzunaris Merced
José E. Blanco

Schools served:

Name of school	Enrollment
Camino Nuevo Second Unit	220
Aguacate Second Unit	260
Jagueyes Second Unit	178
Jácanas Abajo Second Unit	133
Bartolo, Rábanos and Castañer Senior High	310
Montana Antonio Badillo Second Unit	506
Boquerón Second Unit	188
Llanos Tuna Second Unit	180
Puerto Real Second Unit	114
Monte Grande Second Unit	103
Gato Second Unit	142
Saltos Cabra Second Unit	137
Matrullas Second Unit	162
Sanamuertos Second Unit	266
Total	2,901

Number of teachers: 141

	No. pupils
1. Pupils with achievement problems	
a. Pupils with academic learning problems	741
b. Pupils improving in academic achievement after receiving counseling services	436
2. Use of general ability test results and school achievement	
a. Pupils identified with percentile of 75 or more on the general ability test	400
b. Pupils identified with percentile of 75 or more in general ability and doing school work of 2.00 or more	295
c. Pupils identified with percentile of 75 or more in general ability and doing school work of 2.00 or less, who received counseling services, improving their academic achievement	230

d. Activities to help pupils working below capacity
  1. Group counseling and individual interviews
  2. Interviews with teachers
  3. Training in study habits and preparing a work schedule
  4. Interviews and counseling with parents
  5. Followup on failures

e. Activities with talented pupils
  1. Meetings on educational opportunities
  2. Individual interviews
  3. Organization of Pupil-Counselor Committees
  4. Followup on those having scholarships
  5. Group counseling
  6. Film
  7. Seminar on leadership, human relations

3. Pupils participating in personal counseling services	1,034
a. Pupils whose concept of themselves improved	262
b. Pupils who became able to make decisions	365
c. Pupils who succeeded in self-evaluation and understanding of their own abilities and interests	407

4. Identification of and attention to pupil needs

a. Needs of secondary pupils

Vocational and career indecision
Health problems
School retention
Improvement in family and personal relations
Improvement in study habits and school achievement
Attain better school adjustment

b. Activities carried out to take care of these needs

Personal and group counseling
Talks about educational and vocational programs through different agencies
Forums and discussions with parents and pupils
Orientation on characteristics of the adolescent and how to understand them

c. These needs were identified through the following techniques

	No. Pupils
Questionnaire for general information	425
Inventory of study habits	87
Sociogram	44
Personal interviews	458
Group counseling	280

d. Training of teachers for handling pupil needs

Topics discussed	No. Teachers
Prevention of drug addiction	7
Techniques for evaluation of pupils	28
Counseling services	17
Use of cumulative record and anecdotal record	52
Interview techniques	3
Use of individual profile, sociograms, sociodrams, etc.	33
Use of teaching techniques such as panels, symposia, etc.	16
Technique of mental hygiene, auto-evaluation	9
Use of interpretation of socio-economic questionnaire	7
Talk on understanding the adolescent	6

Teachers whose attitude toward pupil behavior improved	78
Teachers whose attitude improved toward participating in the social and personal development of the pupil	63

e. Activities carried out with parents — 28 meetings

Training Topics discussed	No. parents	Individual help Topics	No. parents
Scholarship program	134	Behavioral problems	15
Importance of good achievement	15	Educational opportunities	24
Importance of child's staying in school	40	Asking for economic aid	2
		Achievement	7
How to help study habits of the child	91	Health problems	3
Employment opporttunities	93	Attendance and drop-outs	9
Pupil problems in the school	51	School work	4

Parents taking part in the training	368
Parents who succeeded in understanding their children better in terms of abilities and interests	168
Parents who succeeded in understanding better the stages of growth of the child 12-15 years	21

5. Identification of and attention to pupil problems

a. Problems presented by the students

Achievement
School adjustment
Vocational indecision
Social and/or economic disadvantages
Health

b. These problems were identified using the following techniques:

Techniques	No. pupils
Teacher observations	793
Questionnaires	162
Individual interviews	528
Autobiographies	6
Anecdotal records	5
Information from parents	60
Cumulative records	202

c. Activities with teachers to take care of these problems

Activities	No. teachers
Training in use of cumulative records	14
Talk on mental hygiene	9
Coordination with community agencies	12
Interviews with teachers	10
Interviews with parents	22

d. Number of teachers who were outstanding in their attention of these problems 46

e. Activities carried out with parents to take care of these problems

Topics	No. parents
Meeting on requirements for senior high	120
Meeting on scholarship program	109
Meeting on study habits and future plans	91
Importance of staying in school	40
Individual help to students	36

f. Number of parents who participated actively in attention to these problems 260

g. Successes observed after giving attention to these problems

1. Improved conduct
2. Improved attitudes
3. Improved academic achievement
4. Decrease in absences and class cutting

6. How has the counseling program helped to establish and maintain a helpful climate for the development of process, learning and teaching (talks, workshops, youth and other organizations)

   1. The teacher knows and understands the pupils better after having had training in techniques of mental hygiene.
   2. Student organizations have been re-activated
   3. Talks on nuclear energy have been given
   4. The teachers know counseling services after having taken part in orientation on the field
   5. Students and teachers have identified more with the world of work.
   6. Library activities have been better coordinated so the pupils can make better use of the library.

VALIDATION REPORT ON PROPOSAL NO. 5

Toward Better School Retention: Cooperative Project of School and the Community of Santa Isabel

I- DESCRIPTION OF PROJECT

The project is aimed at raising the level of school retention through enrichment of the basic curriculum, diversifying curricular and co-curricular activities, increasing vocational courses so students may learn a series of skills to prepare them to enter the world of work, recruiting resources for taking care of academic deficiencies in basic subjects, providing guidance and intensive social work services and involving community participation.

II- PROJECT OBJECTIVES

1- Improve school retention from 8% to 10%

2- Provide pupils with pre-vocational- vocational and or academic skills that allow them to enter the employment market in Puerto Rico advantageously.

3- Attract 5% of dropouts back to school

4- Recruit the fullest participation of the community and the homes for improving school retention.

III- PROCEDURES USED IN VALIDATION

A- Strategies

1- Techniques and methods used to gather data

- a. Committee meetings to

    1. clarify purposes of validation

2. examine achievements of project in the light of the objectives in the Proposal and to advise the district beforehand of the visits about those points in achievements that need clearing up.
3. decide on the activities to be carried out to confirm the validity of each identified achievement
4. distribute the tasks to be carried out among the members of the team.
5. prepare the instruments needed for validation
6. prepare a list of all the information needed in anticipation of the visits
7. set up tentative dates for visits to the district and those for deadline on the reports

b. Meetings with administrative personnel, school faculty, parents, community leaders and students

c. Individual interviews with

1. social worker
2. vocational counselor
3. school principal
4. project coordinator
5. assistant superintendent in charge of Title III
6. local planner
7. music, physical education and industrial arts teachers
8. others

d. Group interviews with

1. teachers
2. parents

        3. students

    e. Projective techniques of completing sentences applied to teachers
    f. classroom visits

2. Examination and analysis of the following documents:
    a. official statistics on enrollment and dropouts
    b. comparative information on courses before and after the project is in operation
    c. inventory of equipment and property
    d. project clientele
    e. teacher schedule
    f. tests administered
    g. grade and attendance records
    h. annual reports on guidance and social work
    i. distribution of resources and participating clientele for two consecutive years.
    j. attendance sheets, agenda and minutes of meetings with parents and school visits
    k. albums, films and filmstrips
    l. creative work in the project done by pupils in the art classes
    m. plans books
    n. cost analysis
    o. student organizations

p. external evaluation reports

q. grade distribution by subjects and school grade

r. follow up on graduates

IV - RESULTS OF VALIDATION

A.- Identified achievements that, on validation, are transferable

1. This project is an example of the absolutely necessary and desirable demand for creating social work and guidance counselor positions in all school having similar problems. The achievements claimed reads thus: Social work and vocational guidance services were offered the students all the time . (Previously these were available but only once a week.) After studying all available evidence (See appendix #1), and held interviews with parents, students, teachers and other administrative personnel we have concluded the appointment of a social worker and vocational counselor for Project No. 5 was almost providentially fortunate.

The interviews and meetings showed beyond any reasonable doubt the acceptance by parents and students of these services and their gratitude for them. All those interviewed were of opinion this was the most significant and effective of all the aspects covered in the project.

We cannot say these services were of the highest quality in so far as innovative or exceptional techniques, but there is no doubt they gave the expected results and in many cases went beyond the expectations of the project and of the positions they held. We believe it only fair to point out the humane and professional quality of work by both these persons was a determinant factor in their results.

2. Although not claimed as an achievement by the project, the Validation Committee, through the different strategies used, concluded the use of special resources in music, art, physical education and possibly others contributed to improve conditions described originally in the proposal. It was through activities programmed by the above named resources that certain changes toward favorable attitudes toward school by students and Members of the community could be detected. Available evidence showed that most of the student organizations and activities where the community was directly involved originated directly or indirectly from the initiative of the project. (See Appendix #2). This shows how desirable it is to provide resources of this kind in greater amount and that they need not necessarily be teacher positions.

V- COST ANALYSIS AND BENEFITS

We concluded that in general terms it was impossible to work accurately with the cost analysis given us. Too many questions came up for which we had no answers and so could not react to the document.

Taking as a basis the achievements answered (one) and the day to day experiences of all Committee members we consider the benefits are not comparable in any way with costs; that the money invested is out of proportion with the benefits received.

COST ANALYSIS OF PROJECT NO. 5

Toward a Better School Retention: A Cooperative Product of School and Community

I- INTRODUCTION

Project No. 5

Toward better school retention: A Cooperative Product of School and Community was approved February 16, 1970, under Law 89-10 ESEA. Since then it has been financed under Title III of this Law.

Because the 1969-1970 school year was so far advanced, the investment planned for that year has to be limited to paying for the services of a teacher aide who/was employed for the rest of the year.

On learning the expenses involved in implementing this project, it became necessary to reduce the number of years for the life of the project. This was done both because of the above reason and for the purpose of controling the information on those years when benefits would be greatest.

II- PURPOSE OF ANALYSIS

The cost analysis is aimed at learning what it has cost to implement the project during the designed periods, school years 1970-1971 and 1971-1972. It is intended to show the distribution of cost by components.

Besides showing the distribution of costs, it permits us to see the amount needed to be invested to secure the results observed. Consequently, it provides a basis for comparing fully the financing and the degree of achievement and or benefits obtained. Such an analysis makes it easier to reach decision about the possibilities of adoption or transferral that is contemplated in such projects.

III- WORK PROCEDURE

The cost analysis of Project #5, in the wish to provide a quite reliable estimate of costs, was carried out as follows:

1. Listing of the components funded in the implementation
2. Gathering information on:
    1. length of service of the personnel
    2. purchase of
        a. materials
        b. equipment
    3. other services received
3. Determine the amount invested in personnel for
    1. salaries paid out
    2. fringe benefits
    3. other related expenses
4. Determine the amount invested in equipment, allowing for depreciation for the year in operation.

    Depreciation was calculated using the method "Sum of Years digits," explained in Introductory Principles of Accounting, pages 204-205.

5. Compute the estimated time worked by other personnel who cooperated with the project but were not paid under it. This is included as indirect investment which differs from direct investment that is made on a budgeted financing to assure the implementing and functioning of the project.

6. Other expenses required by the project are calculated, such as expenses for trips.

Because of the difficulty of knowing exactly the cost of each trip, the cost was estimated on the basis of what it would have cost each participating pupil if he had used public transportation for the purpose. In view of the situation faced, we felt this gave us the best average estimate.

7. Cost per capita was computed, based on the total invested in the project and the regular program. In this case, for for the regular program, the cost for personnel was computed, defining this as 90% of all expenses incurred in the regular program Total expenses were estimated on the basis of a 9:1 relation.

8. The information thus obtained was presented in a table reflecting the costs per object of expenditures as related to the budget and to the participation of the principal components (personnel, materials, equipment).

IV- LIMITATIONS ENCOUNTERED

To speak of cost and presume what is presented in these terms constitutes the best possible estimate, it is advisable to point out, in brief, that the following circumstances explain possible variations between the estimate and the true costs which are:

1. expenses for personnel may have anticipated reductions through circumstances that would permit authorized discounts;
2. the purchase of materials at a determined time does not imply necessarily the full use of these during the specified year:
3. the problem of knowing the useful life of equipment when the very suppliers cannot state this precisely, makes it necessary to give a rough guess, thus supposing a margin of error:
4. the lack of evidence for assigning the participation of certain cooperating personnel in the school district;
5. the need to consider those components of greater weight at the risk of suppressing the possible effects of lesser components when these accumulate.
6. the need to assign items that tend to increase the cost because they are related to equipment acquired at the very end of the school year when its use would

be minimal. Equipment in the budget at the beginning of the project has been received by stages.

V- RESUME OF COSTS

As was to be expected, the greater part of the resources destined to financing the project is taken up by project personnel and the lesser part is for materials. The following table confirms this fact:

ITEM	PERCENTAGE	
	1970-1971	1971-1972
1. Project personnel	96%	92%
2. Equipment	3%	4.6%
3. Materials	0.8%	2.8%
4. All other personnel	98%	92%

As can be noted in 1970-1971 the item for materials is almost nonexistent. This is because the amount assigned for this purpose was held over from the original budget for that year, while personnel was almost complete that year. The difference between the two years is due to two factors: an increase in the amount for materials in 1971-1972 and a more liberal procedure for purchasing that permitted the district to use more adequately the resources assigned for this purpose.

The difference in the amount for personnel in 1971-1972 is explained by the increase in the other items.

If a comparison is made between 1970-1971 nad 1971-1972, using the first as the basis for comparison, changes in items and or assigned costs can be seen:.

OBJECT	PERCENT OF INCREASE
Project personnel	37%
Equipment	114%
Materials	412%
All Title III personnel	89%
Regular program personnel	205%

It is easily seen all items have a considerable increase. This clearly indicates the gradual increase in the costs of financing the program both at project level as well as in participation of other sectors.

VALIDATION PROCESS

Check Sheet

Title : Toward Better School Retention; Cooperative Project of School and the Community of Santa Isabel

District : Santa Isabel

Date: December, 1972

I. Indicate by a check mark in the proper column your rating of each area according to the scale:

0- Nothing at all

1- Unsatisfactory

2- Satisfactory

3- Outstanding

4- Excellent

AREAS	0	1	2	3	4
1. The strategies used in the project contribute to solve problem(s) identified in the study of needs		X			
2. The project presents evidence to show the operational objectives were effectively reached		X			
3. The project presents evidence to show the instruments used provide objective and realiable information		X			
4. The project presentes an analysis of cost-effectiveness that reflects a relationship between the costs and the performance of participants		X			
5. Analysis of cost-effectiveness indicates the project is practical (The money spent is justified by the product)		X			

AREAS	0	1	2	3	4
6. The project can be observed both visually and communicably		X			
7. The project has concept or practices obviously original, unusual and exemplary			X		
8. The project offers innovative procedures, techniques and practices that can be disseminated			X		
9. The project has made a significant contribution to the educational system			X		

II. Explain your rating

VII- RECOMMENDATIONS AND GENERAL CONCLUSIONS

A- Conclusions

1. The project as planned in the proposal has not been properly developed. Comparing the proposal with the report on activities performed we find basic activities of the proposal were either not carried out or were so changed as to have lost the original purpose. Vocational courses were not offered as stipulated in the proposal.

2. Quantities of evidence were presented in many cases but it was neither precise nor reliable. In some cases it was even contradictory, so the Committee could not reach definite conclusions. Although we recognize the extraordinary efforts made by part of the personnel to supply the committee with information, it was often irrelevant and unrelated to the achievements to be confirmed.

3. The frequent changes in project and district personnel has had to affect adversely the satisfactory development of the project objectives. This made it impossible to locate certain evidence we considered esential for verifying certain achievements.

4. Physical plant limitations, as well as problems in the school organization, have handicapped carrying out some objectives of the project. In the vocational aspect, we found that, after appointing an industrial arts teacher, he was not given a room. The one he had at first was given to an academic teacher, so this aspect was

not properly taken care of. The same was true of the different skills teachers except for the reading skills teacher.

5. There was no consensus on the effectiveness of the project by teachers, parents, students and other district personnel. In the different meetings and interviews there was strong contradictions about basic aspects of the project, such as school retention, parent participation in school activities, parent attitude toward the school, knowledge of the project, teacher attitudes toward the parents and the number of students sent to the Work-Study Center.

6. Cooperation was lacking between project personnel and supervisory personnel at the different levels in developing a program for professional improvement of teacher and project resources.

7. Different evaluation procedures within the project have not been systematic, making it impossible to gather basic data on academic achievement, study habits, attitudes, interests of students before and after operation of the project.

8. The aspects that had greatest impact in developing the project seem to have been increased guidance and social work services and using academic and complementary teaching resources such as physical education, art, and music.

B- RECOMMENDATIONS

1. That social work, guidance, art, music and physical education resources be supplied to those schools with problems similar to Playita Cortada Second Unit, Santa Isabel.

2. That an extremely careful selection be made of all personnel to be in charge of a project of this nature.

3. That communication with the community be improved so the latter is more aware of the project and can participate more actively and effectively in school activities.

4. That work with the community be carried out systematically

5. That the professional improvement plan be improved for all school personnel.

6. That better physical facilities be provided the school or, instead, the school be helped to prepare an organization able to be adapted to the needs of the project.

7. That more effective and intensive use be made of certain equipment and materials secured especially for meeting specific student needs.

Respectfully submitted by the Validation Committe

Rafael Rosas Couret

Luis A. Figueroa Colón

Vicente Pérez Rivera

Cruz Víctor Colón

Jenny Montes de Laó

Gloria M. Figueroa de Guevara

Appendix #1

1a. Narrative and statistical reports on work performed by the vocational counselor in 1971-1972.

1b. Followup on graduates for 1969-1970, 1970-1971, 1971-1972 (Chart and information)

1c. Student placement in 9th grade for 1969-1970, 1970-1971, 1971-1972 (Chart and information)

1d. Those taking the senior year examination, November 1971

1e. Results of placement tests, August 1971.

1f. Resume of work performed by the social worker in 1971-72.

Appendix #3

ANNUAL REPORT

1971-1972

First Part: Statistical Report on Junior High School

School District: Santa Isabel

Educational Region:

Counselor

María A. García Hernández

ENROLLMENT

Name of School		Junior High	Total
Playita de Cortada Second Unit		267	267
Total			267

I- Activities performed in personal counseling

A- Interviews held

1. Total interviews 494 Total students interviewed 335

2. Problems found in interviews

	GRADES			
PROBLEMS WITH:	7th	8th	9th	TOTAL
1. Potential dropouts	11	9	8	28
2. Achievement	28	26	32	86
3. Special problems:physical, mental, emotional	7	3	5	15
4. Culturally, socially, economically disadvantaged	32	28	25	85
5. Superior achievement students	16	12	20	48
6. School adjustment	28	17	13	58
7. Vocational plans	12	15	49	76
8. Former students and out of school youth	5	14	26	45
9. Other students not included 1-8	15	8	30	53
TOTAL	154	132	208	494

3- Type of interviews

	GRADE			total
	7th	8th	9th	
Voluntary	66	62	103	231
Referrals	35	33	42	107
Schedules	53	38	63	154
Total	154	132	208	494

4- Intensive personal Counseling

1- Groups

Situations discussed	No. of Pupils	No. of Meetings	Grade
1. Academic achievement(low potential)	10	8	8-7-9-
2. School adjustment	8	12	7-3
3. Absences	8	9	7-8-9-
Possible low achievement same interested pupils were placed in the elementary typing course			

2. Individual cases

	No-
Urban junior high	
Rural junior high	4
Total	4

3. Common problems presented by pupils in individual counseling

Problems	Number
	77
Academic Health achievement	56
School adjustment (frequent absence)	52
Study and vocational plans	28
	86
Low potential	17

C- Parent interviews

Topic or purpose	Number
1. Discipline problem of pupil at school	8
2. Information on vocational world	5
3. Information on educational opportunities	3
4. School work being done by son, daughter	18
5. Educational and vocational plans of son, daughter	7
6. Academic achievement problems of son, daughter	10
7. Need of economic help for son, daughter	6
8. Change or readjustment of son, daughter	2
9. Information on son's daughter school success	1

	Number
10. Health problem of son daughter	4
11. Attendance problems of son daughter	9
12. Withdraw son daughter from school	1
13. Enroll son daughter in school	6
14. Information on study training opportunities	8
15. Orientation on colleges and universities	2
	88

D. Interviews with teachers and other school personnel

Teachers	Urban Junior	Rural Junior	Total
Teachers		18	18
Principals	2	12	14
Others	8		8
			40

E- Interviews with persons from other community agencies

Agency	Purpose	No. of interviews
Social Services		6
Vocational rehabilitation		2
Psychological services	Psychometric exam	2
Work-Study Center	Student visits, 2 students referred,.	2
Woodwork shop	Pupil visits	1
Libby's	Pupil visits	1
Agricultural Extension		2

F. Instrument and techniques used for personal inventory

1- Testing program, Department of Education

Tests used	Urban Junior			Total	Rural Junior			Total	Total
	7th	8th	9th	I. U.	7th	8th	9th	I. R.	Alum.
Puerto Rican General Ability					106	75	82	263	263
Spanish Reading Test					106				106
English Reading Test					106				106
Mathematics Test					106				106
Science Test					106				106
Social Studies Test									
Others (including those by (psychologist, psychometers,etc)					7	3	5	15	15

2- Others techniques used

NUMBER OF STUDENTS

Techniques used	Urban Junior			Total	Rural Junior			Total	Total
	7th	8th	9th	I. U.	7th	8th	9th	I. R.	Alum.
General Information questionnaire					106	75	86	267	267
Cumulative record					75	41	86	202	202
Profile						75		75	75
Future Plans questionnaire					15	75	86	176	176
Sociogram						10		10	10
Autobiography									
Home visits					3	7	5	15	15
Record of homeroom					106	75	86		267

II- Activities for giving information

A- Meetings with school personnel

	Urban Junior		Rural Junior		Total
	No. group	No. Meeting	No. group	No. Meeting	
Teacher with pupils Orientation period			7	27	27
Teacher with parents			4	3	3
Counselor with parents			3	3	3
Counselor with pupils			3	25	25

B- Counselor Meetings with agencies and other community groups to get information

Agencies	Total Meetings
Department of Education	3
Special Programs	7
Social Services	2
Health Department	3
Labor Department	1
Agriculture Department	2
Others:	
a. Citizens Committee	2
b. Industries	4
Total	24

2. Senior high

a. Academic

Activity	No. of times	Attendance
Orientation on senior high courses	1	98 students 9 teacher
Visit to senior high	1	86 students 3 teacher
Orientation by Mr. Bohamande on course at Ponce Vocational High School		92 students 5 teacher
Pupil visit to above school	1	79 students 4 teacher

III- Student referrals

Total graduates Urban___ Rural 69 Total 69

A- Referrals to educational programs

Course	No.	%
Commercial education	22	32%
Industrial vocational	20	29%
Cooperative industrial	27	29%
Distribution and Marketing		
Total	69%	100%

* The percentage is based on total number of graduates

B- Placement referrals in and out of school

	Urban			Total Urban	Rural			Total Rural	Grand Total
	7th	8th	9th		7th	8th	9th		
One program to another									
Special programs (typing)					42	42	42		126
One group to another							2		
Industry									
Commerce									
Training Centers									
Part time work									
Schools for adults							1		1
Others									129

C. Student referrals by different levels to the following services:

Urban	Rural	Total		Urban	Rural
		154	1. Medical		
			a. Public Health Unit		5
			b. Psychiatrists		
			c. Psychologists		15
			d. Ophthamologists.		18
			e. Dentists		12
			f. Dispensaries		
			g. Medical Center		
			h. Health Center		10

Urban	Rural	Total	1. Medical	Urban	Rural
			i. Private doctors		8
			j. others		
			2. Drug addiction Investigation Center		
			3. Orientation on and Prevention of Addiction		
	2		4. Psychometrics		
			5. Enrollment Services		
	4		6. Opportunities Center for Youth		
	5		7. Social Services		
			a. Public Welfare		
			b. others		
	3		8. Junior Red Cross		
			9. Transportation		
	5		10. School lunchroom		
			11. Civic agencies		
			12. Social security		
	22		13. Scholarship		
	12		14. Placement tests		
	30	____	15. other persons out of school for equivalency high school exam		
	151	151 Grand Total			

IV- Followup of junior high graduates 1971

1-

	Total Graduate		Continued studying		Did not continue		No information	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
No.		59%		56		3		
%		100%		95%		5%		

2- Continued studying

	Urban		Rural		Total	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
General course senior high			22	37%	22	37%
Commercial course			14	24%	14	24%
Cooperative Industrial education						
Distribution and Marketing						
Trades and Industry			20	34%	20	37%
Others						
Total			56	95%	56	95%

3- Did not continue

a. Employed in:

	Urban		Rural		Total	
	No.	%	No.	%	No.	%
Industry						
Business						
Agriculture						
Government Agencies						
Others						

b- Others activities

	Urban		Rural		Total	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Armed Forces						
United States			1		1	
Housewives			1		1	
Other (death)			1		1	
Unemployed						
No. information						
TOTAL						

NOTE:

The total of 2, 3, and 4 should equal total of graduates. The percentage is based on the total of graduates.

V- Inservice training to teachers and other school personnel by the counselor.

ACTIVITY	NO.	Urban	Rural	Supt.	Assit.	Principal	Assit. Princi-pal	Teachers	Others	Total
Filling out cumulative record cards								8		9
Profile correlation								8		9
Counseling School retention								8		9
Homeroom and its objectives								8		9
Orientation on team work										

VI- Training activities for professional improvement of counselors by the Program

Activity	No.	Topics stressed	Level at which performed		
			Central	Regional	Local
	1			x	
University seminars	3	University and Colleges of P.R.		x	
		Education on drug prevention			
	1			x	
	1			x	
	1			x	

C- Activities in cooperation with other agencies or educational institution:

Activities	No.	Topic stressed	Agency Institution
Orientation seminar	3	Courses in Puerto Rican universities	Catholic University
Equivalency test given for the first time in the school	2	Placement tests	Ponce Region-Extension Program

D- Other professional Meetings attended:

	No.
Supervisory Circle	5
Faculty	9
	8
Drug prevention team	6
Others-Scholarship Committee	7
Total	35

Santa Isabel School District
Playita de Cortada Second Unit
Santa Isabel Puerto Rico

Narrative Report
1971-1972

Name: María C. García Hernández

School: Playita de Cortada Second Unit

District: Santa Isabel

Work performed by the vocational counselor in the Playita de Cortada Second Unit is under Project #5: Toward better school retention a cooperative effort of school and community.

On outlining the plan of work for this school year, I did it with the purpose of carrying out and succeeding in certain of the project objectives that were connected with vocational counseling. Also, with the idea of contributing to the development of the pupils on the basis of better understanding of themselves.

Priorities in the plan according to the project were possible school deserters, potential dropouts who should be retarded, and interaction among school, community and district agencies. Besides the project priorities, the students presented other needs and problems, among which were academic achievement, economic problems, health, absences, which were taken care of according to facilities in the school and district.

About 17 students with desertion characteristics were retained with intensive counseling, group techniques and orientation, including four from junior high and two from elementary school. One characteristic of the group was frequent absences and low achievement. With group conseling absences dropped. One strong motivation for these students was to be included in an elementary typing group that was given in the school.

We were successful in getting services of a psychologist under a Department of Education Title I proposal for diagnosis and study of 15 junior high students and three elementary pupils.

In order to get to know the students better, general information questionnaires and ones on vocational and future plans were used. These were used in addition to meetings with students where they were anxious and desirous of giving us information that was used to offer them better services.

Visits to the Libby factory, embroidery factories, furniture and woodworking shops, the Ponce Vocational School and the Work-Study Center in Juana Díaz were organized with the seventh grade teachers. Student from eighth and ninth grades, also took part in these visits. These experiences were integrated into the homeroom activities and were a big help to ninth grade pupils in decisions about what course to take in senior high.

In the school program for trips I made arrangments for visits to four universities, which was a new experience for the students and where they received orientation from trained personnel who received us. Student reactions were very positive and the visits were a big motivation for continuing their studies.

Through student placement in educational and occupational centers, three out-of-school youth enrolled in the Work-Study Center; one student, who had failed in ninth grade, by his own wish and that of his parents entered an occupational center. Another sixth grader, 16 years old and with low academic achievement by his own wish and that of his parents, also went into an occupational center because of his interests in mechanics and ornamental ironwork.

We succeeded in placing five community youth in the industrial sewing course offered by the Kennedy Senior High School for out-of-school youth.

Three students returning to school in the 6th, 3rd, and 7th grades were given the placement tests, with two staying in the same grade but the one in the 6th going into seventh.

With the idea of getting more interaction among the school, community and government agencies, radio announcements and the municipal loudspeaker were used to announce the high school equivalency test. As a result 30 persons in Playita de Cortada applied for the test and 22 took it in the school under the Educational Extension Program director, Ponce Educational Region.

Later 12 school dropouts asked for the ninth grade test and were referred to the Monserrate Junior High to take in with another group from the town.

I was able to give the general ability test to 25 students, four from elementary level and 21 from junior high in 7th, 8th and 9th grades who had never had it. They were talented candidates with economic problems who applied for help. Nineteen cases were submitted and 15 received scholarships. This semester, in April, I gave seven elementary pupils the general ability test for them to ask for scholarships, as they are talented and have economic problems.

During this year the junior high students had homeroom. The list of topics were developed by the homeroom teachers in terms of needs presented by the students. Interest was focused on the industrial and occupational world, study habits and personality, which were the three basic topics in 7th, 8th and 9th grades along with others. Some topics were well covered. The three basic topics on which attention was focused had been emphasized last year, especially in seventh grade. The one on study habits is very necessary and should be continued, as also personality and the world of work. Homeroom periods have been one achievement of the orientation program this year, as there has been no such period for several years.

Under the school organization a group of 70 (7-3) pupils have most of their classes with elementary level teachers and their schedule has no homeroom period. This group uses the activities period on Wednesday as homeroom, covering those topics where they need most help and which interest them most.

Three counseling groups were organized in the junior high from 7-3, 8-2, 9-1 and 9-2, with 26 pupils involved. During the group counseling and afterwards with the followup, achievement improved and absences and class-cutting dropped. One student from 8-2 group who left school because of family problems and sickness, is now in Ponce and not studying but has plans to return next year to study.

At the beginning of the year I offered orientation on conduct and discipline problems to the groups. 7-2 and 8-2 who were causing trouble in the classrooms. I worked in several homerooms, giving orientation when asked by the teachers as well as helping to prepare materials for homeroom use. In the office as well as in the library there is material and monographs about occupations, colleges and universities. This information was used by pupils of both junior high and elementary level and by homeroom teachers.

This semester I have given orientation to junior high teachers and pupils on the counseling services available and with the cooperation of a group of students, made clearer and more specific, the services I offer as vocational counselor. Even though they know a little about the counseling program, they need to know more about these services.

This was done with seven groups from 7th, 8th and 9th grades. I have succeeded in getting the pupils to begin to ask for these services voluntarily. Most interviews and services I have offered have been requested by the pupils.

There were visits to my office by 33 parents, some of whom came more than once. I held a meeting with 44 parents of 9th grades, four teachers and the school principal to discuss pupil achievement, the importance of having the children continue studying and the help the parents can give their children for the latter to reach their goals.

The period of team work has been to orient the junior high teachers on the cumulative records, the importance of the homeroom, on techniques for knowing better their pupils and to discuss cases of pupils under intensive counseling. A film on team teaching, on loan from the audiovisual program in the Ponce Educational Region, was also discussed with the teachers.

Problems not receiving the desired attention were counseling services that, because of the physical limitations of my office, cannot be carried with the necessary privacy. The social worker must also share the same office.

Under the fourth objective of the project my work is to organize counseling and orientation for parents, out-of school youth and other members of the community. Some parents and out-of-school youth did receive information services as well as being aided to take either the high school equivalency or the ninth grade placement tests. Such services were given only as needed and there was no satisfactory organization of a community orientation program.

A group of five 5th grade pupils took part in group counseling. They had problems of achievement and discipline. Through interviews with the students and the group work it was found one problem, aside from family problems, was that of reading. I explained the reading problem to the principal, who organized a reading group with these pupils. They were enthusiastic and no longer are a behavioral problem.

Sixth grade groups from Playita de las Ollas, the future seventh graders, were given orientation on the differences between their school and the junior high and on services of the counseling program. Orientation services are new to Playita de las Ollas pupils and were a big help for their new school course. Fourth and fifth grades were given orientation on counseling services.

Interviews and home visits were carried out for those pupils who were special cases. Also, home visits were made for pupils with dropout characteristics and who were in group counseling.

In order to learn the effectiveness of the orientation program and the progress of graduates and former pupils who had help, followup was carried out on ninth grade graduates. This study was made in September 1971, using homeroom lists from the senior high and the enrollment of students in the different courses. It was found five had enrolled in woodworking, six in ornamental ironwork, five in industrial sewing, 23 in the general course, 15 in the commercial and five had gone to the Ponce Vocational School.

Total Graduates		59	100%
No. continuing studies		56	
General courses	22		
Commercial course	14		
Diversified occupations	20		
No. studying		3	
Went to the U.S.	1		
Married	1		
Died	1		

The school orientation program will continue under Project #5 and plans are to continue contributing to the development of the objectives and activities of the project. Attention will be given to those priorities that were not satisfactorily handled. Counseling will be more intensive with the changes to be made in my office during the summer. Informational materials, in addition to what we already have, will be developed on the counseling program, knowing the child, etc. and all needed for better functioning of the program. With the principal, training will be organized for the teachers on knowing the child and adolescent better, on techniques, on cumulative records, on academic achievement tests that were given this year, and on general use of the correlation profile and its importance. Pamphlets on the role, functions and duties of the counselor will be prepared.

Orientation w ill be at both junior high and elementary levels, but with more attention to the elementary. The past year and a half the junior high received special attention because of the very urgent need for the serivce. It will continue to receive mush the same services but, in view of the homeroom orientation and that already received so that pupils already know these a little, it will be possible to give more attention to the elementary school. Both teachers and pupils will receive counseling when needed.

Another priority to receive more attention will be counseling services for parents in terms of their interests, concerns and of the problems presented by the pupils. The five basic services of counseling will be offered as the school counseling program progresses.

A serious limitation on the school program has been the lack of privacy for the guidance interviews that are the heart of of good counseling. Almost always when I am interviewing in depth I am interrupted, called out of the office, have to leave because the social worker wants to use the office and is annoyed at having me there or I have to talk in too low a voice. Students passing through the office see someone being interviewed, assume the person is being scolded and later make remarks outside. This means counseling services cannot develop the depth desirable nor give the benefits they should.

The supervisor of guidance, on visiting me, left a list of recommendations, among which was that of dividing the office. They have offered to divide the office for next semester and I am hoping they will do it so that next year better services can be given.

Next year meetings with parents will be held to give them guidance according to the interests and concerns revealed in a survey to be made. Lectures, films, etc., will be used. There will also be a counseling program for school dropouts.

Teacher orientation will be continued, so they understand clearly their part in and responsibility for the program.

This completes my narrative report on the counseling program in the Playita de Cortada Second Unit, including my work in both the elementary and junior high levels.

Total interviews	882 (elementary & junior high)
Total students interviewed	652 (elementary & junior high)

STATISTICAL REPORT ON ELEMENTARY SCHOOL

PLAYITA DE CORTADA S. U.

ENROLLMENT	435	
I- Total interviews		388
Students interviewed		317

II- Problems revealed in the interviews

	GRADES						TOTAL
	I	2	3	4	5	6	
1. Low potential	11	10	7	8	3	9	48
2. Achievement	10	19	13	15	18	16	91
3. Special limitations (physical, mental, emotional)	2	6	3	4	2	4	21
4. Culturally, socially, economically disadvantaged	16	19	22	15	13	17	102
5. Talented	7	5	6	9	8	10	45
6. School adjustment	12	10	8	6	7	9	52
7. Vocational plans	2	2	3	4	7	11	29
TOTAL	60	71	62	61	58	76	388

TYPE OF INTERVIEW

	1	2	3	4	5	6	
	GRADE						TOTAL
Voluntary	9	14	24	22	23	33	125
Referral	10	19	10	13	16	15	83
Schedules	41	38	28	26	19	28	180
TOTAL	60	71	62	61	58	76	388

Intensive Counseling

Groups:

Situation discussed	No. pupils per group	No. of Groups	Grade
Attendance, achievement school adjustment	7	10	5°

Individual, Elementary

(cases)

2

Problems most common in individual counseling

Health	45
Finance	73
Adjustment	39
Achievement	62

INTERVIEWS WITH PARENTS

1 - Discipline problems of pupil in school	10
2. Information on educational opportunities	5
3. School work being done by son daughter	7
4. Achievement problems of son daughter	2
5. Health problems	12
6. Attendance problems	9
7. Withdraw pupil from school	2
8. Enroll pupil	5
TOTAL	52

INTERVIEWS WITH TEACHERS

13

Testing program Department of Education

4th Grade	86 Mathematics and Spanish test
4th Grade	36 General Ability
1st., 2rd., 3rd.	3 Psychological

Other techniques

Autobiography	6th grade	40 students

Orientation Meetings with students:

No. of groups	No. of meetings
4 groups	4 groups

Student referrals from different levels

Medical services	rural
Public Health Unit	3
Psychological	3
Ophthalmological	9
Dental	15
Health Center	5
Private doctors	7
Opportunity Center for Youth	1
Scholarships	4
Others-Placement test	1
	48

Student changed from one group to another

14 student of 6th grade placed in elementary typing course offered at the school

7 students 6-1

7 students 6-2

Graduating from 6th 72

9TH GRADE PLACEMENT TEST

August 26, 1971
Ponce, Region

1- William Pérez Ayala	8°
2- Félix Rafael Serrano	7°
3- Basilisa Meléndez	6°

November 30, 1971
Monserrate School

1- Ana Silvia	5°
2- Edwin Degrós	5°
3- Miguel Ortíz Rubert	6°
4- Carmelo Santiago Sotomayor	9°

DEPARTMENT OF EDUCATION

HUMACAO, PUERTO RICO

VALIDATION REPORT

PROJECT #9, Centers for diagnosis and treatment
of learners with reading deficiencies
Humacao, School District

63/64

I- PROJECT DESCRIPTION

After having administered a set of reading tests and others, and results were analyzed, it was found that public schools of the Humacao School District and, in particular the Buena Vista Second Unit, Pasto Viejo Second Unit, Candelero Abajo, Antonia Sáez, Parcelas Antón Ruiz and Patagonia School, were below the average in comparison with the Island schools, in the language arts, especially where reading mechanisms and comprehension are concerned, in the third to sixth grades.

Besides the tests administered, a study of the students' emotional and socio-economic factors was conducted in the aforementioned schools.

A series of orientation meetings with members of the community and especially with parents of the school children and school personnel, were carried out.

It was decided, then, to implement a proposal to handle the diagnosis and treatment of learners with reading deficiencies.

II- OBJECTIVES OF THE PROJECT

1. After conducting diagnostic tests on: aural skills, oral expression, phonemes, oral reading, rapidity, and reading comprehension and interpretation, among the groups at Patagonia, Antonia Sáez, Buena Vista Second Unit, Pasto Viejo Second Unit, Parcelas Antón Ruiz and Candelero Abajo, the reading deficiencies of 80% of the students in these groups will be determined.

2. After selecting the number of students who will participate in the reading centers, the physical, social and economic factors which affect the learning process in 60% of the students will be identified.

3. Once the students participating in these reading centers are chosen they will be grouped together by type of deficiency and the process of correcting the reading deficiencies found in the diagnosis, will be carried on with 60% of them.

4. After inservice training is offered to teachers of these centers professional improvement is expected in 70% of them.

5. Once the reading center pupils leave this training, a followup will be carried out for 60% of them in order to determine their progress in the language arts classes.

III- PROCEDURE USED IN THE VALIDATION

A- Strategies used:

1. Interviews with following persons:

   a. Miss Nilsa Julbe
      Project Director

   b. Mrs. Carmina Martínez
      Principal, Antonia Sáez School

   c. Mrs. Juanita Medina
      Principal, Antón Ruiz

   ch. Mrs. Ana Rossy
      Principal, Candelero Abajo

d. Mrs. Carmen D. Reyes
   Principal, Pasto Viejo Second Unit

e. Mr. Osvaldo Pérez
   Principal, Patagonia

f. Mrs. Carmen Fernández
   Teacher, Antonia Sáez School

g. Miss. Gloria M. Cruz
   Teacher, Antón Ruiz

h. Miss Myriam E. Pomales
   Teacher, Patagonia

i. Miss Senona Ríos
   Teacher, Pasto Viejo Second Unit

j. Miss Carmen López
   Teacher, Candelero Abajo School

k. Miss María M. Román
   Assistant Teacher, Pasto Viejo Second Unit

l. Miss Virginia Laguna
   Assistant Teacher, Patagonia

ll. Mrs. Carmen Santisteban
   School, Social Worker

m. Mrs. Arroyo
   Assistant Teacher, Candelero Abajo

n. Mrs. Lucía Santiago
   Assistant Teacher, Candelero Abajo

ñ. Mrs. Petra López
   Regular teacher for the Antonia Sáez
   school groups

0. Mrs. Aida M. Ayala
   Regular teacher for the 5th and 6th grades at the
   Antonia Sáez School

p. Mr. Angel Quiñonez
   Regular teacher of Spanish at the Candelero Abajo School

q. Mrs. Arroyo
   Nurse in the Project

r. Miss Goméz
   School Worker

s. The following parents were interviewed:

   1. Juana Elba Goméz Laíz
   2. Fortunada Rosario Cruz
   3. Julia M. Sánchez Cruz
   4. Francisca Martes Lazú
   5. Joaquina del Moral Cruz

t. The following students were interviewed:

   1. Zunín Cruz
   2. Luis D. Ramírez
   3. César A. López
   4. Juan Rodríguez del Moral
   5. Brunilda Sánchez Soler

u. Personnel of the School lunch Progam, Candelero Abajo School, was interviewd

2. Observation

3. Revision of reports

A- Documents

1. Administered tests

   a. Diagnostic tests included in the first unit: What do we know about our own language?

2. Case History

   a. Inventory of interests
   b. Results of psychometric tests
   c. Results of interviews with the Social Worker on cases
   d. Academic
      (a) profiles
   e. cumulative cards

3. Records

   a. academic progress
   b. Followup for dismissed students
   c. administered tests
   ch. cases with reading problems
   d. medical cards
   e. Academic

4. Daily routine plans

   a. Materials being used
   b. Student exercises prepared by the teachers
   c. teaching

5. Samples of Material written by the students

6. Study and analysis of the results of diagnostic tests included in the unit What do we know about our own language?

7. Written opinion of teachers, parents and students about the center.

8. Samples showing student grades when they start at the Center and up to the time of returning to the regular class.

9. Case history of the Center

10. Professional notebooks

11. Observation of class sessions

IV- VALIDATION RESULTS:

The sub-group composed of Mr. Sigfredo Alvira, Mrs. Eustaquia Figueroa, Mrs. Nellie Castro and Mrs. Lydia Cáceres, participated in the validation of outcomes No. 1 and 2 which read as follows:

Outcome. No. 1 The use of the professional services of teachers, social workers, nurse, psychologist, psychiatrist, pediatrician and other specialists has allowed us to identify the following factors as the ones affecting the children's learning process of reading.

Outcome. No. 2 The following strategies have been used in order to overcome the difficulties affecting the children's learning process in reading.

See the assesed strategies in the document submitted by Mr. Jesús Vega Martínez to the Central Office, entitled "Request for reconsideration of outcomes for validation of the Project No. 9, for the Humacao Educational District."

As a result of the strategies used in the validation process, we have reached the following conclusions:

1- In reference to the cultural limitations, the Center carried out a number of activities which resulted in the enrichment and progress of the clientele involved.

a. Visits to several cultural sites in Puerto Rico such as:

1. Ponce Art Museum
2. International Airport
3. El Morro fortress, and others

b. Visits to Municipal Government Agencies.

2. Materials provided by the teacher through which the pupils are exposed to a series of vicarious experiences.

a. Through the aid of audiovisual devices such as:

1. Opaque projector
2. Recorder and others

3. Repeated absences were reduced to the minimum because of the special services provided by the Center:

a. Medical services

1. pediatrician
2. nurse
3. specialists
4. dentists
5. laboratories

b. Other services

1. psychologist
2. social worker
3. psychiatrists
4. social services

4. Economic needs

a. Through the proposal and the assignment of several specialists, a great number of pupils have been able to receive professional services which, otherwise, they wouldn't have obtained considering their economic limitation

1. Dental services

   a. Cases with special conditions

      1. malformed dentures

      2. gum surgery

      3. denture braces

2. Breakfast for needy clients who attend the center.

   1. Undernourished children as diagnosed by physicians.

3. Orienting the community on how to improve their economic condition at home.

   Example:

      a. How to apply for a job

      b. Leading community members to obtain jobs.

5. Mental capacity of 79% or less

   a. Through the professional aid which the Center has offered these pupils, certain progress has been noticed in spite of their limitations.

      1. Pupils who couldn't recognize vowels, now read whole words, phrases and sentences.

      2. They can recognize phonemes and read them aloud.

      3. It was observed that pupils are gaining understanding of what they read up to the expected level.

      4. They demonstrated they can interpret also up to the expected level.

6. Shyness

a. It was noticed that a number of children were shy. This was probably due to the following:

1. No experience in meeting strangers
2. Personality problems
3. Home environment problems

7. Cutting down on class absences

It has been observed that the children are attending their classes regularly and this is probably due to the following:

a. A variety of materials which are related to the interests of children who are affected by this kind of problem.

b. Through the Center a higher level of responsiveness of the faculties that form the school nuclei, has been obtained

1. Collaborate with the Centers resource teacher in the coordination of activities for the Center.
2. Discuss the problems of the children who attend the Center and of those who are in the regular groups.
3. They use strategies which operate in the Center and apply them to regular classes to handle individual cases.

8. Strategies designed for outcome No. 2 have been observed, ascertained and implemented at the school nuclei visited

The subgroup composed of Mrs. Sonia Lôpez, Mrs. Provi Scott, Mrs. Arteaga, Mrs. Román and Mr. Roque Díaz Tizol participated in the validation of outcomes No. 3 and 4 which read as follows:

Outcome No. 3	The extent to which students have improved their reading skills for which they have shown difficulties, has been identified.
Outcome No. 4	Inservice orientation has been offered to a large number of teachers who have worked at the center. For this, we have used the local and regional resources that were available. A number of additional teachers from the school district has also benefited from this orientation.

As a result of the strategies used in the validation process, we have found the following:

General aspects:

1. A positive attitude from the principals toward the center in terms of:

   a. acceptance of the project.

b. Necessary flexibility for satisfactory operation of the Center without interfering with the regular teaching program in all subjects.

c. Awareness of each individual childs' knowledge

ch. Agreement between the established policy for teaching Spanish and the operation of the Center.

d. In the projects' procedures which is reflected in the acceptance of the Validation Committee

e. Sharing positive experiences with other school groups.

2. A quite positive attitude of the center's teachers, assistants, regular teachers, parents and pupils toward the Center.

a. The regular teacher seems satisfied with the help provided by the Center.

b. There is a closer relation among the faculty of the school groups and between the school and the community.

c. There is a lower school desertion.

ch. Increased interest of the children in their school work.

Specific aspects:

Documents:

1. There is evidence in every center of the administration, tabulation and analysis of the diagnostic tests included in the first unit of the Spanish program, What do we know about our own language?

2. Most of the Centers have up-to-date case histories of the students, although occasionally there are a few incomplete ones.

3. There is evidence that attention is given children in all aspects of their personality

4. It is evident that the majority of the pupils in this project have improved their reading skills.

   a. comprehension and interpretation
   b. selection of details
   c. organization of ideas
   ch. logical sequence
   d. oral reading
   e. mechanism

Nevertheless, there is a group of students which have not improved much due to their limitations which has only been found out during the project. These students have received intensive help from everyone at the center which has resulted in reasonable improvement considering their handicaps.

5. There is evidence that the teacher makes daily plans in accordance with each pupils' needs.

6. The teacher has a choice of audiovisual devices to carry on his classes and in most casesthese are adequately used.

7. There is proof that the Center operates in close relation with the regular teacher.

8. Each one of the Centers has its own record of activities from the beginning of the project.

In relation to achievement #4 we have found the following:

Teachers have received orientation on the following aspects:

1. New Spanish program
2. Diagnostic tests
3. Global method for teaching reading
4. Use of audiovisual resources
5. Production of auxiliary materials
    - a. Reading posters
    - b. Experience posters
    - c. Devices for individual help
    - ch. Mimeographed material
    - d. Slides

In reference to achievement #3, we have been able to confirm the success of the training offered.

Achievements which are transferable :

1. The day-to-day actual and inclusive individual pupil standing as appraised by teacher, which allows him to take care adequately of the pupils' needs.
2. Equipment and audiovisual material
    - a. slides
    - b. films
    - c. reading modules for different uses (this is a great help for teachers with illegible handwriting)

3. Progress in the training which has been offered with the help of the most outstanding teachers in the project.

4. The use of strategies to overcome handicaps of children in reading skills.

NOTE: Example of documents that proved the progress mentioned, are in the possession of Mrs. Nellie Castro, Title III Analyst from the Central Office.

V- COST AND BENEFITS ANALYSIS:

Mr. Agustín Herrera Gostá, Regional Planner and Project Planner, will be in charge.

APPENDIX #2

VALIDATION PROCESS

CHECKSHEET

TITLE OF PROJECT: Centers for diagnosis and treatment of learners with reading deficiencies

DISTRICT Humacao School District Date: January 12, 1973.

1. Indicate with a checkmark the category in which you would classify each one of the aspects, using the following rating:

0-None of the elements is present

1-deficient outcome in this area

2-satisfactory outcome in this area

3-outstanding outcome in this area

4-excellent outcome in this area

AREAS	0	1	2	3	4
1. The strategy(s) used in this project contributes to the solution of the problem or problems identified in the study of needs.					X
2. The project presents evidence indicating that operational objectives were effective					X
3. The project presents evidence indicating that instruments used give accurate and reliable information				X	

AREAS	0	1	2	3	4
4. The project presents a cost-effectiveness analysis which indicates relation between costs and participants, performances				X	
5. The cost-effectiveness analysis indicates that adoption is feasible. The costs are justifiable in terms of the projects' results				X	
6. The project can be visually appraised and is communicable.					X
or 7. The project contains concepts/practices recognized as innovative, new and exemplary					X
8. The project presents a number of procedures, techniques and innovative practices that can be disseminated..					X
9. The project makes a significant contribution to the educational system.					X

II. Explain your classification:

In accordance with the criteria of Excellence with which the project was classified, it can be concluded that the project's outcomes as well as the innovative ideas contained therein, are exportable to other school districts with same characteristics as those validated.

VII- RECOMMENDATIONS:

1. Provisions should be made for a larger amount of excursions to cultural sites in Puerto Rico and abroad in order to expand the cultural environment of the clientele.
   a. Funds should be provided to pay for the boarding of on-site visitors. We think this will help them to improve their personal desires.
2. In Centers where no provision is made for the teaching of the mentally handicapped learners (properly identified), the position of specialized teacher to take care of these children should be assigned, so that the normal operation of qualified students for the center can function to capacity.
3. We recommend that some other kind of school organization (like staggered periods, if possible) be used, so that the teaching of some subjects of the regular program would not be affected.

4. In reference to services, the human resources of Social Work should be used more intensively or should concentrate more on only one group or center. The benefits tend to diminish when the social worker is in charge of, at least, three centers.

5. Kindergartens and pre-kinder should be established at the centers.

6. Full training should be provided for the personnel in charge of these centers.

Example:

a. Courses in special reading skills for all the teachers working at the centers.

b. Courses in Social Work for a Master's degree should be provided for the social workers holding positions at the Centers.

c. Courses in Nursing toward a B.S. degree for the nurse in charge of the centers.

7. A simple blank-form in which all the information concerning each participant learner would be recorded must be provided to every teacher.

Validation team, Project #9: Centers for diagnosis and treatment of learners with reading deficiencies

Year 1970-71

1. Mr. Sigfredo Alvira
   Superintendent of Schools, Patillas
2. Mrs. Eustaquia Figueroa Flores
   General Supervisor, Humacao
3. Mrs. Nellie Castro
   Analyst Title III-Central Office, Department of Education
4. Mrs. Sonia López
   Elementary School Teacher, Juncos
5. Mr. Roque Díaz Tizol
   Assistant Superintendent, Yabucoa
6. Mrs. Annie Arteaga
   General Supervisor
7. Mrs. Idelia de Román
   Spanish Program, Central Office
8. Mrs. Provi Scott
   Regional Supervisor for Spanish
9. Lydia Cáceres de Blasini
   Principal-Elementary Urban School

COST -EFFECTIVENESS ANALYSIS Project #9

						PERSONNEL		
1969-1970	Equipment Percent Amount of Co.	Materials Percent Amount of Col.	Facilities Percent Amount of Col.	Training Percent Amount of Col.	Remodeling Percent Amount of Col	Professional Amount	Non-Professional Amount	Total
First year Regularly provided and cost borne by Department of Education			$1500.00 100%			$4,468.80		$5,968.80
Funds under Title III	$8,980.87 100%	$3,705.46 100%				$33,448.25	$7,949.36	$54,083.94
Funds from other resources								
Total	$8,980.87	$3,705.46	$1500.00	$00.00	$00.00	$37,917.05	$7,949.36	$60,052.74

Department of Education expenditures per participant (Excluding additional costs) ________ $ 15.95
Number of participants served by project ________ 3·74
Average number of hours per participant served ________ 2.00
Project expenditures per participant ________ $160.56

						PERSONNEL		
1970-71 b. Second year Regularly provided by and funded by Department of Education	Equipment Percent Amount of Co.	Materials Percent Amount of Col.	Facilities Percent Amount of Col.	Training Percent Amount of Col.	Remodeling Percent Amount of Col	Professional Amount	Non-Professional Amount	Total
			$3,000.00 100%			$10,528.00		$13,528.00
Funds under Title III	$7,771.47 100%	$5, 218.00				78,830.95	20,889.75/	112,710.17
Funds from other resources								
Total	$7,771.47	$5,218.00	$3,000.00	$00.00	$00.00	$89.358.95	20,889.75/	126,238.17

Department of Education expenditures per participant (Excluding additional costs)	($ 28.42)
Number of participants served by project	(476)
Average number of hours per participant served	(200)
Project expenditures per participant	($256.20)

1971-72 C. Third year Regularly provided by and cost borne by Department of Education	Equipment Percent Amount of Co.	Materials Percent Amount of Col.	Facilities Percent Amount of Col.	Training Percent Amount of Col.	Remodeling Percent Amount of Col	PERSONNEL Professional Amount	Non-Professional Amount	Total
			$3,000.00 100% $3,000.00 100%			$11,894.40		$14,894.40
Funds under Title III	$4,944.87 100%	$4,000.00 100%				$64,173.99	$22,930.45/	96,048.31
Funds from other resources								
Total	$4,944.87	$4,000.00	$3,000.00	$00.00	$00.00	$76,068.39	$22,930.45/	110,943.7

Department of Education expenditures per participant (Excluding additional costs)	$38.38
Number of participants served by project	3.89
Average number of hours per participant served	2.00
Project expenditures per participant	$285.20

PERS[illegible]EL -COST ANALYSIS

PROJECT No. 9

	1969 - 70			1970-71			1971-72			1969-72
	Salaries	Fringe Benefits	Total	Salaries	Fringe Benefits	Total	Salaries	Fringe Benefits	Total	Grand Total
Teachers	$15,630.00	$1,875.60	$17,505.60	$37,040.00	$4,444.80	$41,484.80	$32,940.00	$3,952.80	$36,892.80	$95,883.20
Assistants	7,260.00	871.20	8,131.20	17,270.00	2,072.40	19,342.40	18,000.00	2,160.00	20,160.00	47,633.60
Nurse	1,980.00	297.00	2,277.00	3,300.00	495.00	3,795.00	3,850.50	577.50	4,427.50	10,499.50
Driver (50%)	682.50	102.37	784.87	1,530.00	229.50	1,759.50	1,680.00	252.00	1,932.00	4,476.37
Office clerk I	1,137.50	170.62	1,308.12	3,000.00	450.00	3,450.00	2,970.00	418.50	3,388.50	8,146.62
Secretary for District	682.50	102.37	784.87	735.00	110.25	845.25	648.00	97.20	745.20	2,375.32
Coordinator Audiovisual	2,820.00	338.40	3,158.40	6,300.00	756.00	7,056.00	7,080.00	849.60	7,929.60	18,844.00
Social Workers	2,430.00	364.50	2,794.50	9,600.00	1,440.00	11,040.00	10,815.00	1,622.25	12,437.25	26,271.75
Project Director		-	-	-	-	-	4,795.00	575.40	575.40	5,370.40
Assistant Superintendent	4,200.00	504.00	4,704.00	9,120.00	1,094.40	10,214.40	-	-	-	14,918.40
Local Planner	3,900.00	468.00	4,368.00	8,400.00	1,008.00	9,408.00	-	-	-	13,776.00
Totals	$ 40,722.50	$5,094.06	$45,816.56	$96,295.00	$12,100.35	$108,395.35	$82,778.00	$10,505.25	$93,283.85	$247,495.76

	1969- 70			1970- 71			1971- 72			Grand Total
	Salaries	Fringe Benefits	Total	Salaries	Fringe Benefits	Total	Salaries	Fringe Benefits	Total	
Teaching Personnel	$29,820.00	$3,478.40	$33,298.40	$68,730.00	$8,247.60	$76,977.60	$52,195.00	$6,263.40	$58,458.40	$ 168,734.40
Government Positions	3,990.00	478.80	4,468.80	9,400.00	1,128.00	10,528.00	10,620.00	1,274.40	11,894.40	26,891.20
Professional Services	-	-	-	1,500.00	-	1,500.00	5,165.00	-	5,165.00	6,665.00
Classified Personnel	6,912.50	1,036.86	7,949.36	18,165.00	2,724.75	20,889.75	19,963.00	2,967.45	22,930.45	51,769.56
Facilities	1,500.00	-	1,500.00	3,000.00	-	3,000.00	3,000.00	-	3,000.00	7,500.00
Equipment	8,910.21	-	8,910.21	7,448.67	-	7,448.67	4,619.87	-	4,619.87	20,978.75
Materials	3,705.46	-	3,705.46	5,218.00	-	5,218.00	4,000.00	-	4,000.00	12,923.46
Mileage	149.85	-	149.85	353.35	-	353.35	550.59	-	550.59	1,053.79
Transportation expenditures	70.66	-	70.66	322.80	-	322.80	325.00	-	325.00	718.46
Total	$55,058.68	$4,994.06	$60,052.74	$114,137.82	$12,100.35	$126,238.17	$100,438.46	$10,505.25	$110,943.71	$297,234.62

PROJECT NO. 9 EXPENDITURES

	1969 - 70	1970 - 71	1971 - 72	Total 1969 - 72
Department of Education Expenditures	5,968.80	13,528.00	14,894.40	$ 34,391.20
xpenditures Title III	54,083.94	112,710.17	96,049.31	262,843.42
Project Expenditures	60,052.74	126,238.17	110,943.71	$297,234.62

EXPENDITURES PER PARTICIPANT

	1969-70	1970-71	1971-72	
Department of Education	$ 15.95	$ 28.42	$ 38.28	
Title III	144.60	236.78	246.91	
Project	160.56	265.20	285.20	

VALIDATION REPORT

PROJECT #10

MOBILE UNIT OF EDUCATIONAL EXPERIENCES

GUAYNABO DEMONSTRATION DISTRICT

SAN JUAN EDUCATIONAL REGION

90

Commonwealth of Puerto Rico
Department of Education
San Juan Regional Office
Hato Rey, P. R.

Validation Report

Title of project : Project #10

Mobile Unit of Educational Experiences

Demonstration District : Guaynabo

Date of visit : December 27, 28, 29, 1972

Submitted by: Validation Committee

Participants	Position	District
1. Margarita González	Science Supervisor	San Juan Area
2. Havdeé Arufat de Lugo	Science Coordinator	Río Piedras B
3. Dora H. de Martínez	Director S.U. Cupey	Río Piedras C
4. Margarita Boada	Mathematics Supervisor	San Juan Area
5. Carmen Rodríguez	Mathematics Coordinator	San Juan West
6. Carmen J. Cantres	Director S.U. Pájaros	Toa Baja
7. Manuel Suárez Agosto	School Superintendent	Corozal
8. Diana Iris García	Spanish teacher	Corozal
9. William Nieves	Director S. U. Cuchillas	Corozal
10. Myrtelina Ramírez	Libraries Supervisor	San Juan Area
11. Eval Thomas	Librarian	Río Piedras A
12. Carmen R. Díaz de Ramos	Educational Technology Supervisor	San Juan Area
13. Irmina A. de Aldarondo	Evaluative Supervisor	San Juan Area
14. Iris A. Martínez	Analyst of Teaching Programs	Representative Title III of the Coordinator, Central Office

I. Project Description

The project consists of a mobile unit especially prepared to service the rural zone. It gives service to seven of the ten districts (barrios) into which the municipality of Guaynabo is divided; as follows :

Barrio Guaraguao	1,510 residents
Barrio Santa Rosa	2,910 residents
Barrio Sonadora	1,060 residents
Barrio Frailes	3,940 residents
Barrio Camarones	2,940 residents
Barrio Mamey	2,040 residents

From these barrios, the mobile unit takes care of 16 schools, which are :

Schools	Enrollment
Rafael Hernández	432
Juana Ramos	67
Santa Rosa III	379
Frailes Altos	129
Camarones IV	565
Camarones Carretera	58
*Camarones Centro	83
*Canta Gallo	142
*Santa Rosa I	94

*Santa Rosa II	17
*Sonadora Alto	140
*Mamey Centro	98
Hato Nuevo	152
Piedra Blanca	32
Jagueyes	27
Total enrollment	2,415

The unit consists of a library especially selected for children and teachers on the elementary level, where they borrow story books, supplementary reading material and professional books. These services are extended to their homes, so that parents may also benefit from them.

It has simple audiovisual equipment that includes a tape recorder, projectors, record player, a small area for maps, globes, slides, transparencies, diapositives and films, which can be borrowed by local teachers periodically, once they have learned how to use them.

The unit is in charge of a librarian and two resource teachers quite competent in the teaching of Spanish, science and mathematics. These resource teachers in charge of the unit, train teachers in the correct operation and effective use of the audiovisual equipment. The training phase for teachers includes demonstration and orientation on techniques and enrichment of the curricular content.

---

* Schools participating during the second and third year operation of the project.

II. Objectives of Project

Through the project development, the following are the objectives to be attained :

A. Students

1. Offering students of the rural area of Guaynabo many educational opportunities of high quality, we expect them to improve their back-ground of experiences in Spanish, science and mathematics, from the first to the third grades.
    a. They will improve their skills in writing, vocabulary, and in reading comprehension and interpretation
    b. They will improve their basic skills in learning science as a process, in the first, second and third grades.
    c. They will improve their skills in learning modern mathematics in the first, second and third grades
    d. They will improve their study habits in every instructional area at the most appropriate age for it
    e. They will make use of reading in all aspects : basic, and as an instrument and as recreation
    f. They will enjoy an alive curriculum for learning

g. They will handle books, equipment and suitable instructional materials in keeping with their interests

B. Teacher

By providing the teachers in charge of students of the rural zone with some technical help, materials and adequate equipment to carry on their work, we expect that they will enrich their experiences and develop the ability to :

1. Teach the basic skills in Spanish, both as an instrument and as recreation, from the first, to the third grades.
2. Teach sciences as a process from the first to the third grades
3. Teach modern mathematics skills from the first to the third grades
4. Give training in the correct use of audiovisual equipment and materials

III. Procedure

A. Strategies used : The following techniques and methods were used :

1. Interviews with :

a. Administration

School Superintendent, Assistant Superintendents and Planner

Mrs. Isabel Rivera - Superintendent

Mrs. Myrna Zayas - Planner

Mr. Samuel Ruiz - Title III Assistant Superintendent

Miss Virginia López - Assistant Superintendent

The above persons reported on their participation in the planning, programming, implementation and evaluation of the project at the local level.

b. Project personnel

Resource Teachers

Mrs. Hilda Reyes - Coordinator - Language Arts

Mrs. María I. Llovet - Science and mathematics

Mrs. Juanita Ferreira - Librarian

Principals of the schools involved in the project:

Mrs. María González

Mrs. Emma Meléndez de López

They explained to us their duties and the tasks performed, which were duly verified. Team work and disposition to cooperate as well as their dedication was quite commendable (See appendix #3)

c. Faculty

1. Direct observation and visits to the school room
2. Personal interviews with teachers
3. It was evident that the teachers were conscious of their responsibilities in the project. They knew what they were doing.

4. An effective communication between principal, teachers and resource teachers was observed

d. Interviews with a sample of parents

Parents were interviewed at the different schools visited and from their responses it could be concluded that they are well informed about the project and think it has had a favorable impact upon their children's school work.

Among the parents interviewed were:

Mrs. María Luisa Ortega
Mrs. Esther Guzmán
Mrs. Teófila Fuentes
Mrs. Carmen López
Mrs. Adelaida Reyes
Mrs. Buenaventura Merced

e. Students

By talking to the students it was easy to see how happy and interested they are with the work of the mobile unit personnel. They feel they are well taken care of and say they have progressed considerably. They also pointed out that the library services of the mobile unit have benefited their parents and other members of the family since they can enjoy reading together the books thus supplied them.

II. Visits to the schools

a. One member of the faculty was chosen as a sample to be interviewed personally

Escuela Sonadora

a. Mrs. María Pérez: Third grade teacher
It was obvious that she has been trained and is using the skills she has acquired.

Escuela Camarones Centro

b. Myriam Pellot: Third grade teacher
Remarkable progress in the evaluation of the children in science was observed, as shown in the teacher's records.

c. Ana Luisa G. Torres: Third grade teacher
Although new to the project, she showed she had grasped the importance on the project and is using the mobile unit services to enrich her classes.

b. Sampling visits:
Different nuclei where the project is being developed were visited and classes, teachers and students' records were observed (See table, page 8) We are including a sample of the progress attained by science students in two

of the schools visited :

Mamey Centro School

Camarones Centro School

Evidence of the progress attained in mathematics by students of Santa Rosa I is also included. (See tables, page 10)

Table I

Purpose of visits

School	Grade	Teachers Interviewed	Parents Interviewed	Interviews Students	Classes Observe
Camarones Centro	3	2	2	8	1
Santa Rosa II	1-4			3	2
Sonadora	3	1	8	38	1
Mamey Centro	1-4			6	2
Santa Rosa I	1	1		10	1
TOTAL		4	10	65	7

Table I

Progress Attained

Science grades '- Sample

School
Mamey Centro

Teacher: Miriam Pellot
Grade 3

	1969 - 70	1970 - 71	1971-72
1. Maribel Fontanez	C	B	A
2. Eugenio Muñoz	C	C	B
3. Roberto Pérez	D	D	D
4. Miriam Rivera	B	A	A
5. Luis E. Rosario	C	B	A

Table II

School
Camarones Centro

Teacher: Luisa G. Torres
Grade 3

	1969-70	1970 - 71	1971- 72
1. Ivan Cabello	C	B	B
2. Ivette Cabello	D	C	C
3. Elizabeth Ruiz	C	C	C
4. Mildred Rivera	B	B	B
5. Rita Rivera	B	A	B
6. Marcos Negrón	C	B	B
7. Carmen Z. Martínez	B	B	B
8. José A. Guzmán	C	B	B
9. Evelyn Gorjas	C	C	B
10. Moisés Cancel	D	C	C
11. Rolando Camarero	C	B	B
12. Jorge Camarero	D	C	D
13. Maribel Cancel	D	C	C

Table IV - Progress Attained

Sample of grades on Mathematics

School: Santa Rosa I	Grade: Fourth		Teacher: Sra. Pedraza		
	I 1969 - 70	II 1970 - 71	III 1971-72	*IV 1972-73	Remarks
1. Ivette Báez	D	D	C	D	Sample Slight retardation
2. Jeanette Báez	C	C	B	B	
3. Isael Cintrón	C	C	C	C	*Grade of fourth grade mathematics represents the average up to December 1972.
4. José H. Fuentes	F	F	C	B	
5. Héctor García	D	C	C	D	
6. Billy Ortolaza	D	C	B	B	
7. Norma Resto	B	B	B	B	
8. Pedro Rodríguez	C	C	B	B	
9. Janet Rosa	B	A	A	A	
10. Ivette Vargas	B	A	A	A	

C. Visits to test students' reading

The nuclei of Sonadora, Canta Gallo, Santa Rosa I and Santa Rosa II were visited for the purpose of testing a samole of students of the first, second, third and fourth grades; 23 students were tested. Students read fluently and with good expression the material given to them. It was also observed that they can manage several basic skills of language mechanics.

For further details on significant progress on the Language Arts, se Appendix #2 (graphs 1, 2, 3, 4, 5 and 6).

D. Observation

Through direct observation, the operation of library services was checked and the use of these services by students and teachers was also verified.

It was evident that parents were aware of this service.

See appendix #5 on services provided.

B. Documents examined

1. Original and restructured proposal based on actual practice, recommendations and objectives
2. Project history
3. Pamphlet - Divulgation Program 1970-71
4. Work records of assistant superintendents, principals, resource teachers, and classroom teachers
    a. Professional scripts
    b. Work plans for the District
    c. Work plans of the project personnel
    d. Reports on work carried out by project personnel
    e. Example of the mobile unit programming
    f. Results of tests administered
    g. Charts
    h. Materials produced in Spanish, science and mathematic
    i. Tests prepared
    j. Tests administered
    k. Cumulative records
    l. Record books

m. Student notebooks

IV. Results of Validation:

A. Identified attainments

1. Itinerant service : It was observed that the human resources of the mobile unit are used for training teachers and for the production of materials in science, mathematics and the language arts, without interrupting school schedule for pupils and teachers. Also, the benefits of educational technology and library services are extended to students, teachers and parents as well.

2. Library services : The use of a mobile unit to service isolated rural sectors has been effective. A lot of school districts in Puerto Rico could benefit from this practice.

3. Materials produced : The production of materials by project resources in cooperation with classroom teachers is commendable. The materials produced on science, mathematics and Spanish should be disseminated throughout the region and the district for the benefit of other teachers of these subjects.

B. Progress attained by clientele

1. Direct observation and charts show that 50% of the students attained control of the skills of language mechanics.

2. A glance at pupils' notebooks shows that hand-writing is legible and has improved.

3. Teachers visited show that they have mastered the process of

teaching reading, modern mathematics and science by processes

4. Students and teachers have benefited greatly from the help offered by the project. Experiences of pupils and teachers in the project have been of great value.
5. In the first grade, the percentage of students on the level of independent reading increased from 25% to 43%.
6. In the second grade the percentage of students on the level of independent reading increased from 22% to 56%.
7. In mathematics the students show a better control of the basic skills of addition and substraction.
8. There is evidence that the children have improved their study habits and have cultivated the habits of reading for pleasure and recreation.

V. Cost analysis

Project 10 Title III Law 91-230
Mobile Unit of Educational Experiences
Cost Analysis

Summary 1969 - 1970

	Funds		
Items	Federal	State	Total
I. Personnel			
A. Teaching	$12,474.46	$2,401.00	$14,875.46
B. Classified	1,798.50	--------	1,798.50
C. Contracts	1,800.90	--------	1,800.90
D. Fringe Benefits	1,750.74	285.72	2,036.46
Sub-Total	$17,824.60	$2,686.72	$20,511.32

II. Equipment			
A. Purchased			
B. On loan from CRE			
C. Use of Classrooms		$210.00	$210.00
D. Classroom equipment		37.20	37.20
III. Materials			
A. Office and Production	$1,096.89		$1,096.89
IV. Transportation expenditures	200.30		200.30
total	$19,121.79	$2,933.92	$22,055.71

Students taken care of as direct clientele	2,254 (2 months)
Teachers taken care of as direct clientele	78 (2 months)

Cost per student $9.78

Project 10 Title III Law 91-230
Mobile Unit of Educational Experiences
Cost Analysis

Summary 1970 - 71

Items	Funds		
	Federal	State	Total
I. Personnel			
A. Teaching	$24,197.35	$14,912.50	$39,109.85
B. Classified	4,440.00		4,440.00
C. Contracts	5,265.00		5,265.00
D. Fringe benefits	3,960.12	1,864.62	5,824.74
Sub-Total	$37,862.47	$16,777.12	$54,639.59
II. Equipment			
A. Purchased	$ 3,473.76		$ 3,473.76
B. On loan from Cre	[illegible]3.30		23.30
C. Use of classroom		840.00	840.00
D. Classroom equipment		134.10	134.10
III. Materials	937.32		937.32
IV. Transportation expenditures	232.50		232.50
Total	$42,529.35	$17,751.22	$60,280.57

Students taken care of as direct clientele	1st. semester	2,294
	2nd. semester	727
Teachers taken care of as direct clientele	1st. semester	78
	2nd. semester	27

Cost per student	1st. semester	$26.27
Cost per student	2nd. semester	$82.91

Project 10 Title III Law 91-230
Mobile Unit of Educational Experiences
Cost Analysis

Summary 1971- 72

Items	Funds Federal	Funds State	Total
I. Personnel			
A. Teaching	$25,332.75	$10,360.00	$35,692.75
B. Classified	4,506.00		4,506.00
C. Contracts	4,269.95		4,269.95
D. Fringe Benefits	4,148.37	1,398.60	5,546.97
Sub-Total	$38,257.07	$11,758.60	$50,015.67
II. Equipment			
A. Purchased	$ 2,962.13		$ 2,962.13
B. On loan from CRE	208.85		208.85
C. Use of classrooms		840.00	840.00
D. Classroom equipment		119.20	119.20
III. Materials			
A. Purchased	$ 1,521.47		$ 1,521.47
B. Donated by CRE	350.00		350.00
IV. Transportation expenditure	232.50		232.50
Total	$43,532.02	$12,717.80	$56,249.82

Students taken care of as direct clientele	712
Teachers taken care of as direct clientele	27
Cost per student	$78.91

VI. Filling out parallel sheet

Process of Validation

Parallel sheet

Project title Mobile Unit of Educational Experiences

District Guaynabo Date January 24, 1973

I. Indicate with checking mark the category in which you would classify each one of the aspects, using the following scale:

0 - None of the elements is present
1 - Deficient outcome in this area
2 - Satisfactory outcome in this area
3 - Exceptional outcome in this area
4 - Excellent outcome in this area

Areas	0	1	2	3	4
1. The project used in the project contribute to solve problem (s) identified in the study of needs.				x	
2. The project presents evidence to show the operational objectives were effectively reached.					x
3. The project presents evidence to show the instruments used provide objective and reliable information.				x	
4. The project presents an analysis of cost-effectiveness that reflects a relationship between the costs and the performance of participants.				x	
5. Analysis of cost-effectiveness indicates the project is practical (The money spent is justified by the product.)				x	
6. The project can be observed both visually and communicably.					x

Areas	0	1	2	3	4
7. The project has concept or practices obviously original, unusual and exemplary.				x	
8. The project offers innovative procedures, techniques and practices that can be disseminated.				x	
9. The project has made a significant contribution to the educational system.					x

Total: 30 points

II. Explain your classification

See information:

a) pages 5-14 from report

VII. Recommendations or conclusions :

1. This project makes a significant contribution to the educational system of Puerto Rico presenting a alternative which will offer better and broader educational oportunities to students and teachers from isolated rural areas through its mobile unit.
2. The itinerant service design developed by this project could be put into use not only in isolated rural areas but also in urban areas where it is not possible to receive certain services of inservice training to teachers, without affecting the schedule, of curricular enrichment and of expanded educational opportunities for students and parents.
3. Outcomes of this project should be disseminated for the benefit of the whole educational system. The materials produced should be shared by teachers of all elementary, rural and urban levels, of Guaynabo, since some of these have started to be disseminated to other school districts of the Region.
4. We think it is advisable that permanent personnel should be secured since this will insure the future outcomes at district level.
5. The professional training of the mobile unit resource teachers team, together with the cooperation and willingness to work of the personnel involved in the participating schools, is commendable. There is no doubt that the success of the project is due to these persons.

APPENDIX # 1

STUDENT PROMOTIONS

ISOLATED RURAL ZONES

1971 - 1972

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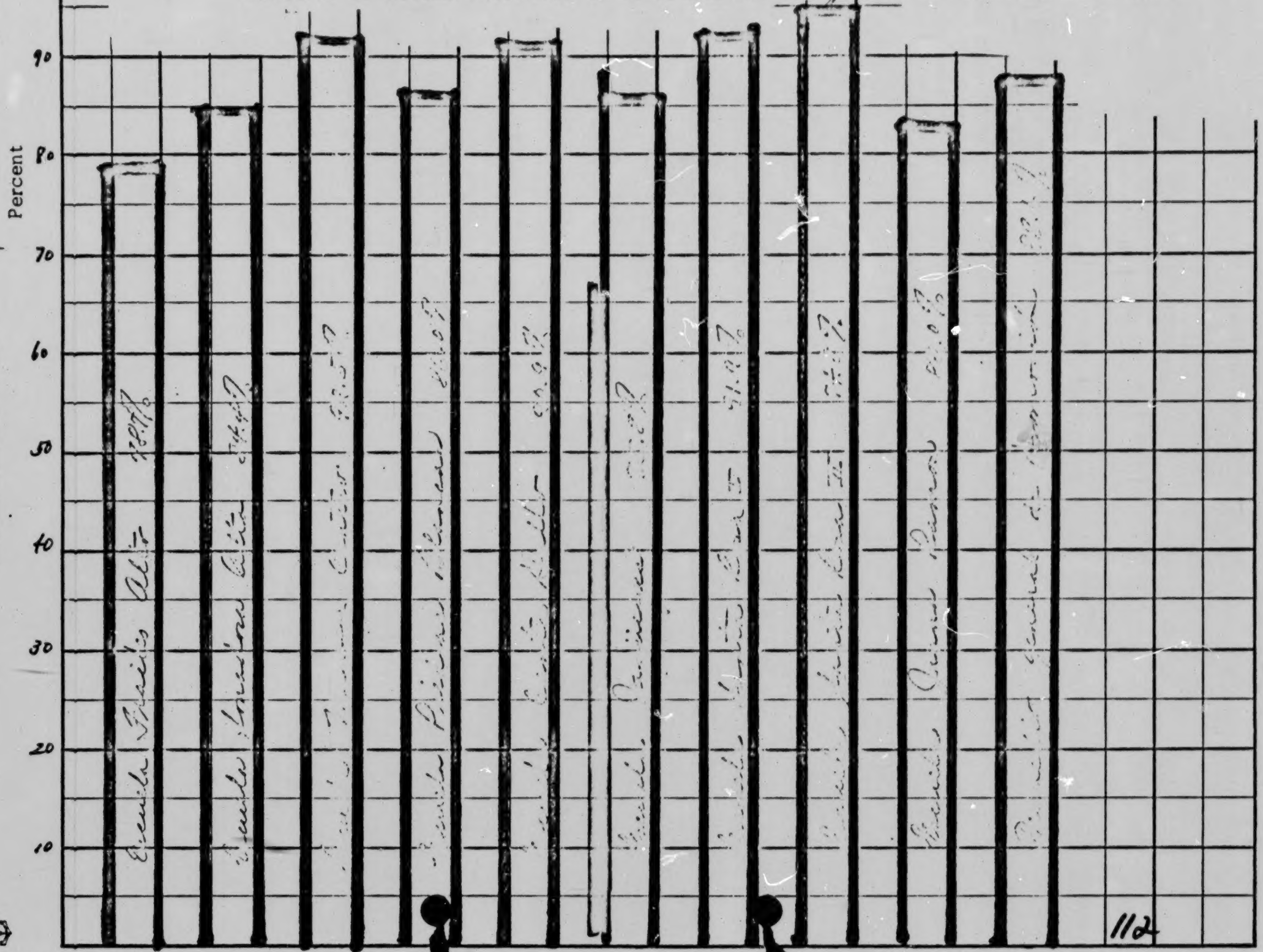
MOBILE UNIT OF EDUCATIONAL EXPERIENCES
PERCENT OF SUPILS PROMOTED IN 1st., 2nd. and 3rd. GRADES ISOLATED RURAL ZONE



APPENDIX # 2

LANGUAGE ARTS SITUATION

GENERAL SITUATION FOUND IN LANGUAGE ARTS MECHANICS OF READING

ISOLATED RURAL ZONE

FEBRUARY 1968-69 TO 1971-72

FIRST GRADE

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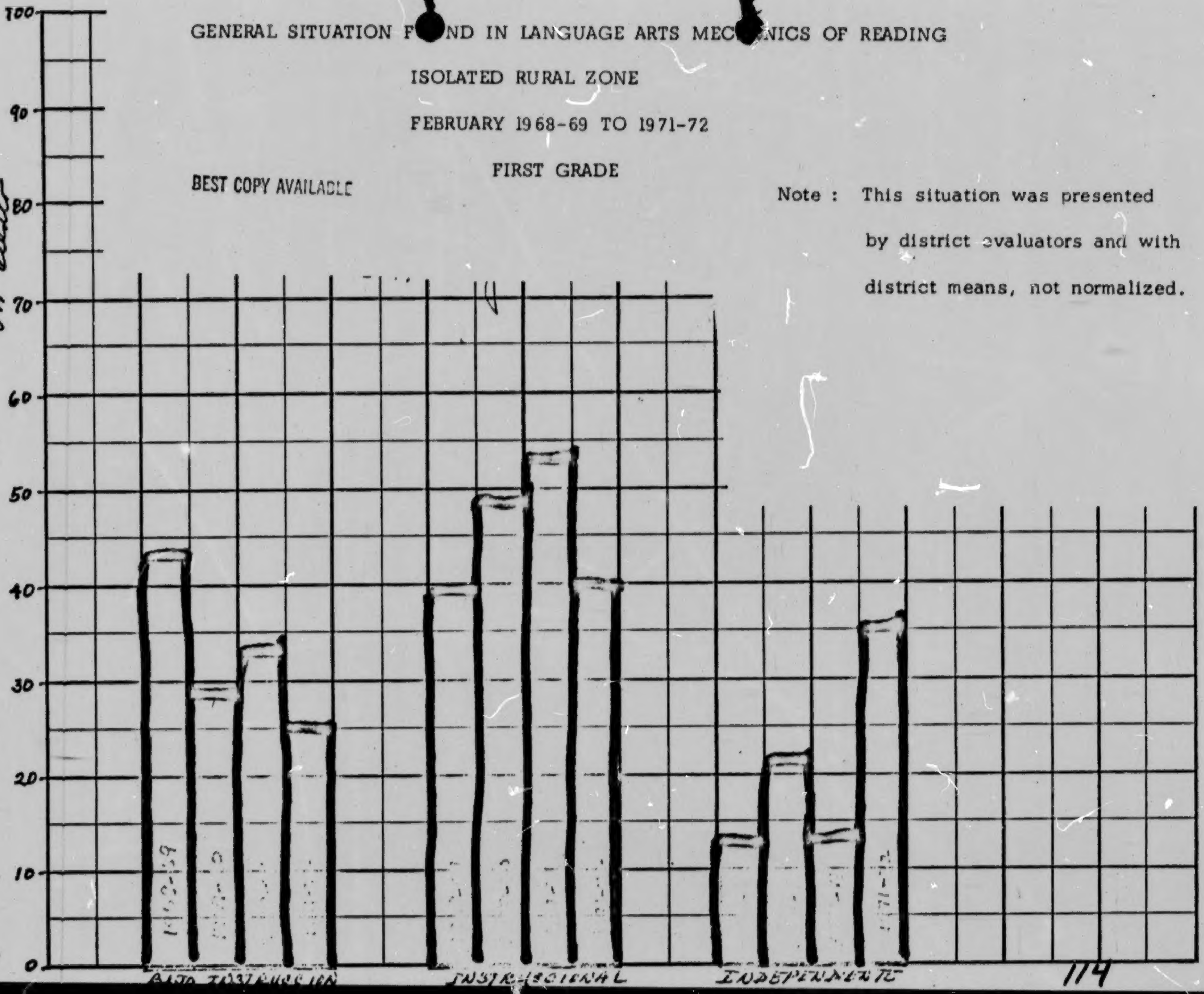
Note : This situation was presented by district evaluators and with district means, not normalized.



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SCIENCE-A PROCESS APPROACH

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PROJECT # 10 - MOBILE UNIT OF EDUCATIONAL EXPERIENCES

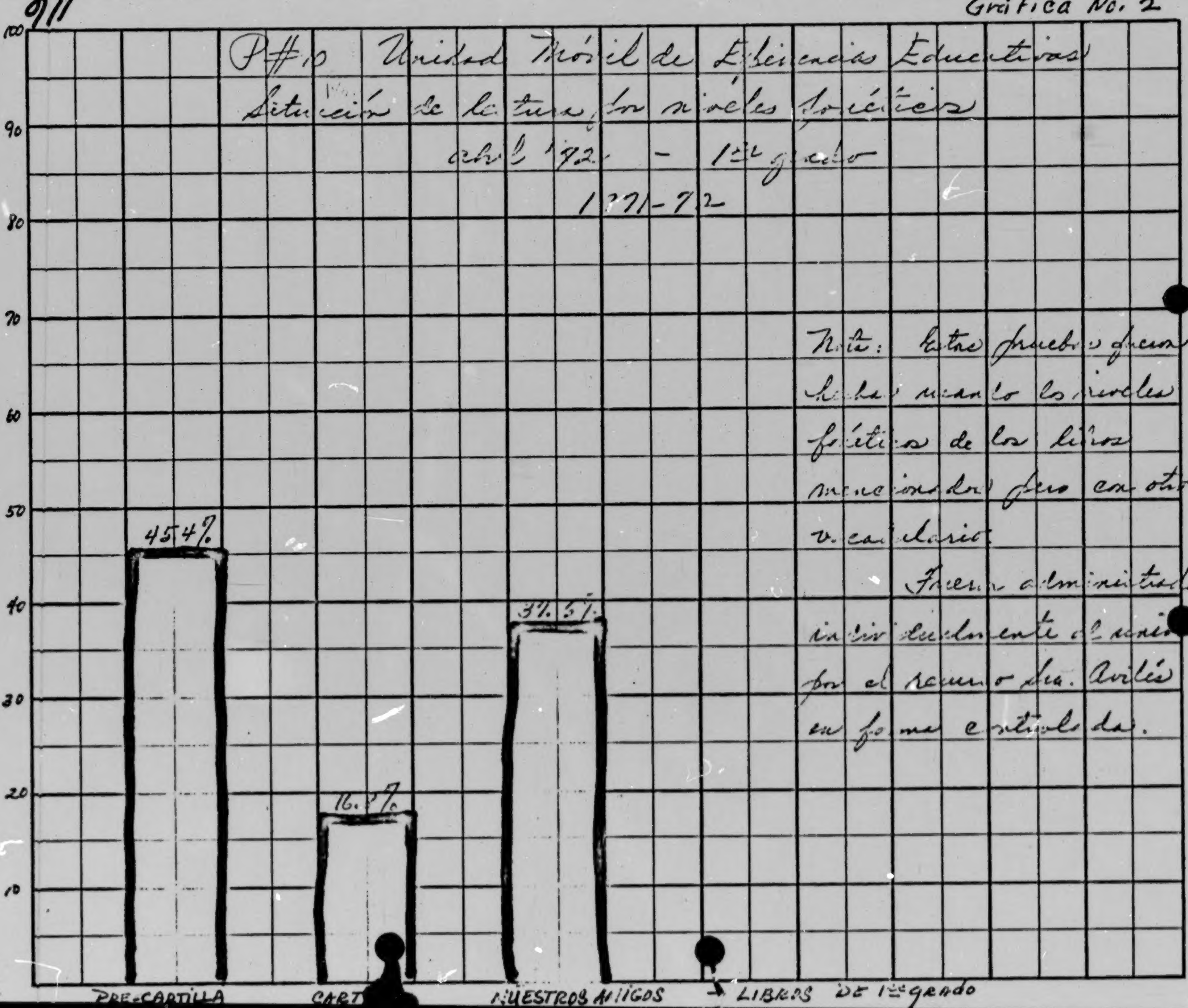
READING MECHANICS - LANGUAGE ARTS - ISOLATED RURAL ZONE

FIRST GRADE

Escuelas	1968-69			1969-70			1970-71			1971-72		
Primer Grado	BI	Ins.	Ind.	BI	Ins.	Ind.	BI	Ins.	Ind.	BI	Ins.	Ind.
Frailes Alto	25%	32%	10%	--	---	---	21%	39%	39%	28%	36%	36%
Mamey Centro	13	45	40	17	47	34	37	62	0	14%	22	64
Sonadora Alta	19	69	11	33	41	25	21	78	0	40	50	9
Santa Rosa I	28	53	20	47	14	38	35	53	10	25	53	21
Camarones Centro	47	53	0	--	--	--	41	58	0	41	21	29
Juana Ramos	63	37	0	25	58	16	20	40	40	34	26	38
Jagueyes	21	50	28	31	69	0	30	50	20	16	66	16
Canta Gallo	72	18	10	18	63	18	43	57	0	15	42	42
Piedras Blancas	100	0	0	--	--	--	44	33	22	18	50	31
TOTALES	388	357	119	171	292	131	292	470	131	231	366	286
Promedio	43%	39%	13%	28%	48%	26%	32%	52%	14%	25%	40%	35%

Nota: Escuela Santa Rosa II no enseñaba 1er grado.

Gráfica No. 2



P#10 Unidad Móvil de Eficiencias Educativas

Situación de lectura por niveles fonéticos

abril '72 - 1er grado

1971-72

Nota: Estas pruebas fueron hechas usando los niveles fonéticos de los libros mencionados pero con otro vocabulario.

Fueron administradas individualmente al niño por el señor Sra. Avilés en forma controlada.

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SCIENCE-A PROCESS APPROACH
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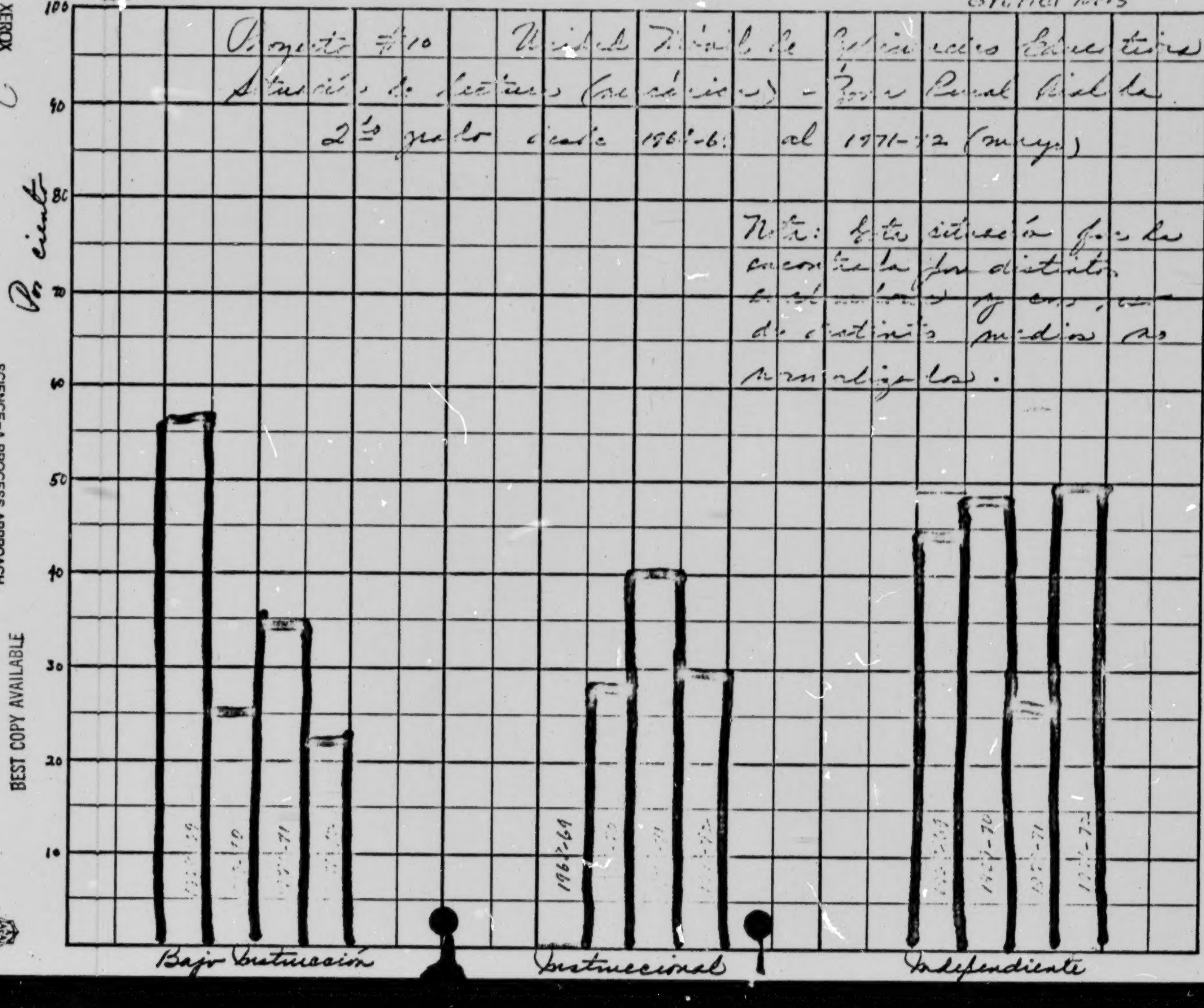
Gráfica No. 3



Proyecto #10 Unidad Rural de Investigaciones Educativas
Situación de lectura (académica) - Zona Rural Aislada.
2do grado desde 1968-69 al 1971-72 (mayo)

Nota: Esta situación fue la encontrada por distintos evaluadores y con uso de distintos medios de normalizarlos.

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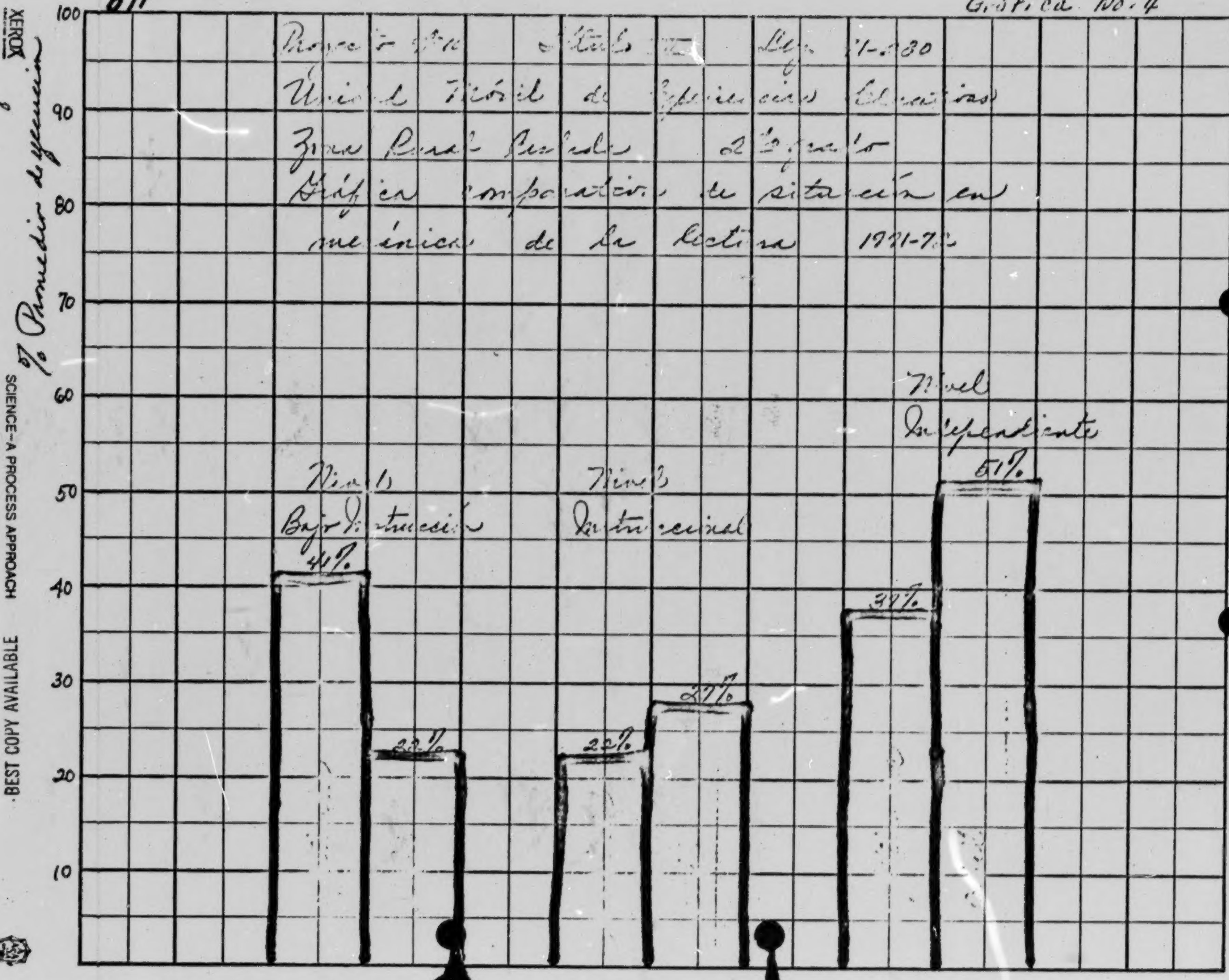
MOBILE UNIT OF EDUCATIONAL EXPERIENCE

TABLE ON THE READING SITUATION - SECOND GRADE

ISOLATED RURAL ZONE 1968-69 to 1971 - 72 (MAY)

Escuela	1968 - 69			1969 - 70			1970 - 71			1971 - 72		
	B.I	Ins.	Ind.	B. I	Ins.	Ind.	B. I	Ins.	Ind.	B. I	Ins.	Ind.
Santa Rosa I	27 %	0 %	73 %	29 %	11 %	59 %	57 %	42 %	0 %	13 %	40 %	47 %
Sonadora Alta	41	0	59	36	9	54	15	36 "	47	21	21	53
Canta Gallo	25	0	75	24	36	39	62	37	0	47	18	35
Frailes Altos	72	0	27	?	?	?	58	41	0	19	25	56
Juana Ramos	97	0	3	57	42	0	9	42	42	24	36	40
Camarones Centro	58	0	42	?	?	?	25	40	35	14	29	57
Mamey Centro	42	0	58	15	36	47	0	50	50	20	42	32
Piedras Blancas	85	0	15	0	50	50	62	30	8	15	40	45
Jaruoyos	No ofrecía 2do grado.			12	12	75	16	41	41	29	0	71
Santa Rosa II	No ofrecía 2do grado.									12	41	47
Total	447	0	352	173	196	324	304	359	223	214	292	488
%	56 %	0 %	44 %	25 %	28 %	44 %	34 %	40 %	25 %	22 %	29 %	49 %

Gráfica No. 4



Proyecto [illegible] Título III Ley 91-230

Unidad Móvil de Experiencias Educativas

Zona Rural [illegible] 2º grado

Gráfica comparativa de situación en mecánica de la lectura 1971-72

SCIENCE—A PROCESS APPROACH

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READING SITUATION (MECHANICS) COMPARATIVE TABLE

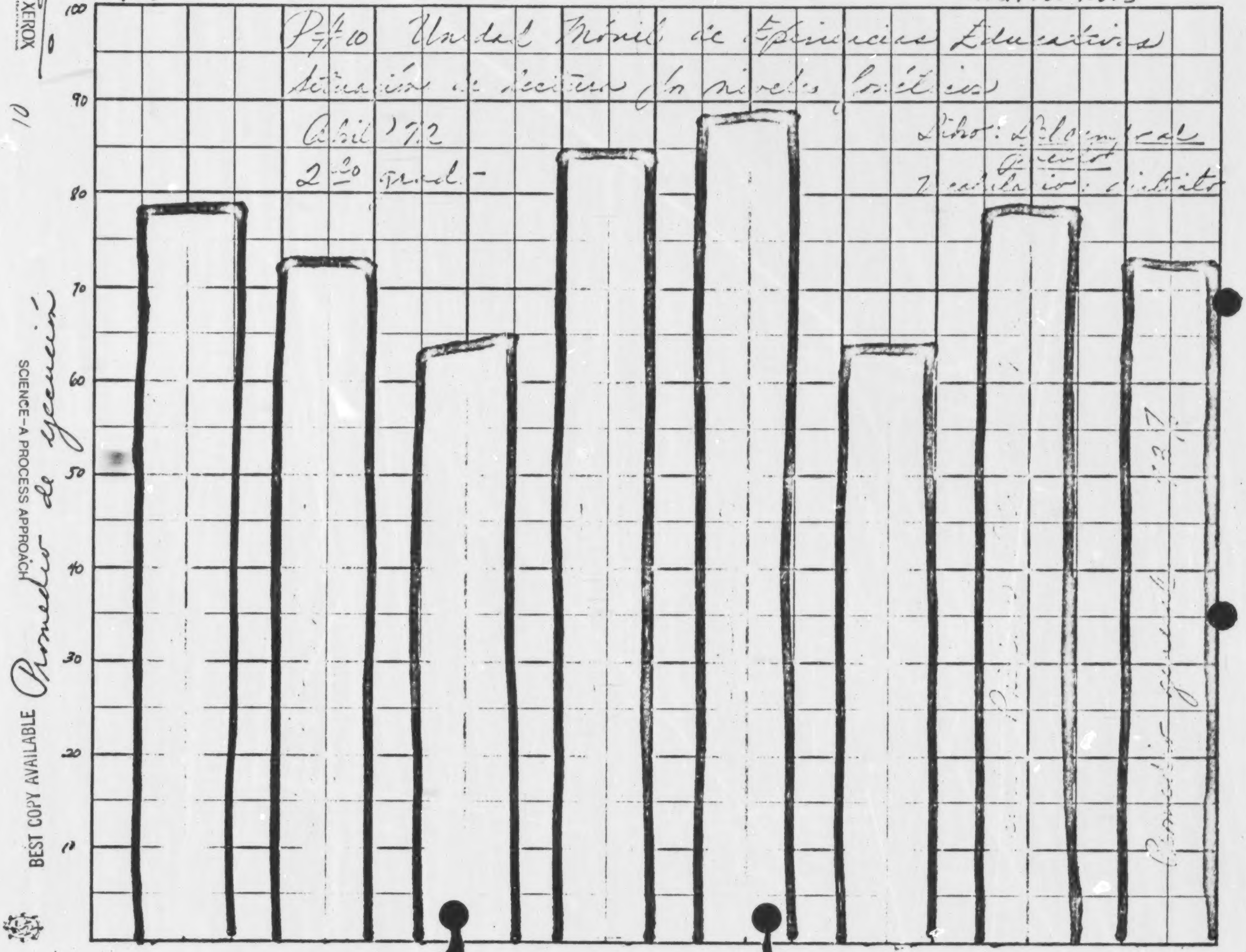
ISOLATED RURAL ZONE 1971-72

2nd Grade

ESCUELAS	Septiembre 1971			Abril 1972		
	B. Instruc	Instrucc.	Independ.	B.I	Inst.	Indep.
Canta Gallo	70%	5%	23%	47%	17%	35%
Mamey Centro	58%	0%	42%	20%	37%	42%
Santa Rosa II	29%	41%	29%	11%	41%	47%
Santa Rosa I	27%	34%	37%	13%	40%	46%
Frailes Alto	50%	0%	50%	25%	0%	75%
Juana Ramos	28%	40%	32%	16%	36%	48%
Camarones Centro	28%	42%	28%	28%	88%	42%
Jagueyes	33%	11%	55%	29%	0%	71%
Piedras Blancas	42%	19%	38%	15%	40%	45%
TOTAL	365%	192	334%	204	239	451%
Promedio de ejecución	41%	22%	37%	22%	27%	51%

120

Gráfica No. 5



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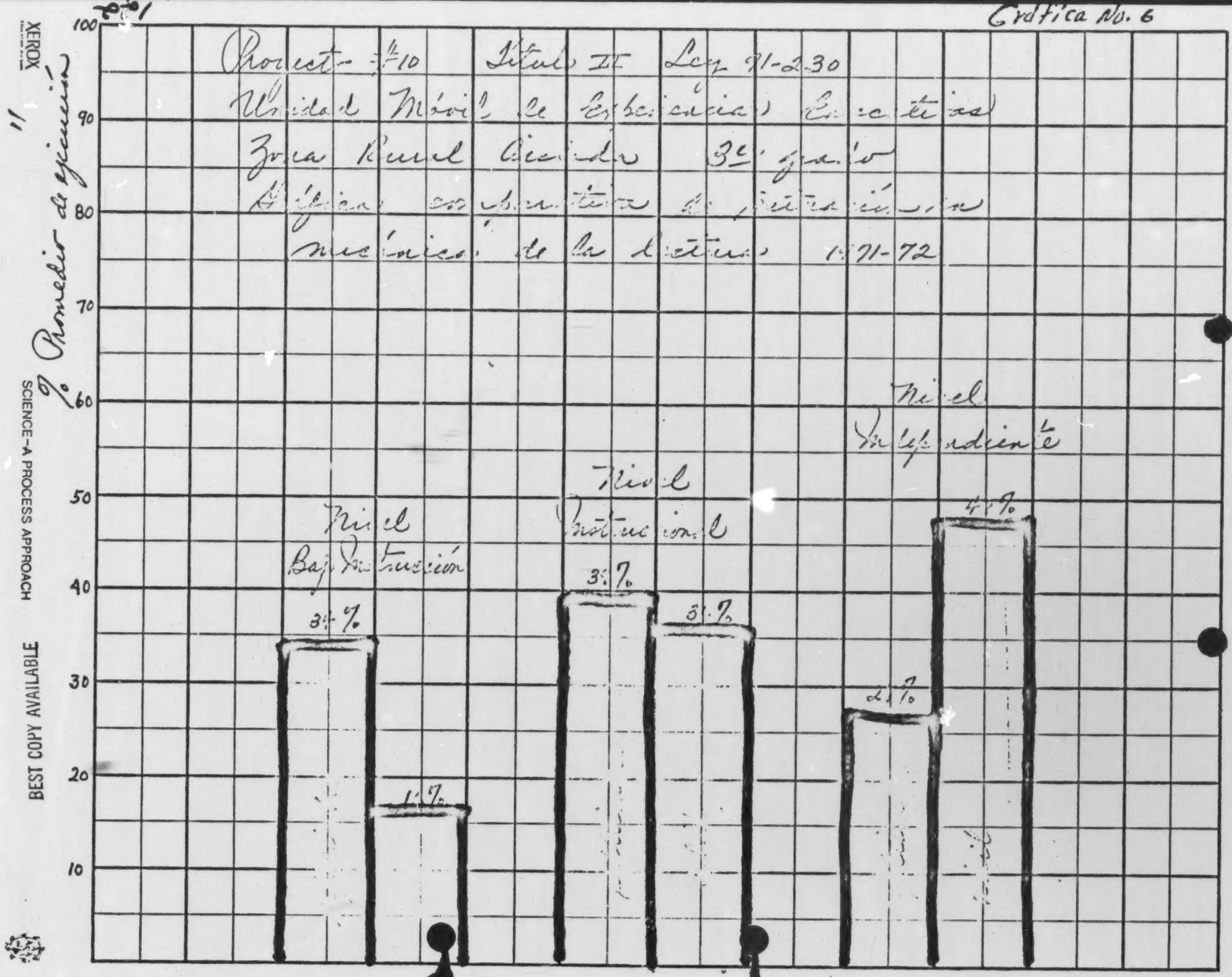
Gráfica No. 6

Proyecto #10 Título II Ley 91-230
Unidad Móvil de Experiencias Educativas
Zona Rural [illegible] 3er grado
Gráfica comparativa de ejecución en
mecánica de la lectura 1971-72



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MOBILE UNIT OF EDUCATIONAL EXPERIENCES

READING SITUATION (MECHNICS) COMPARATIVE TABLE

ISOLATED RURAL ZONE 1971 - 1972

3rd. grade

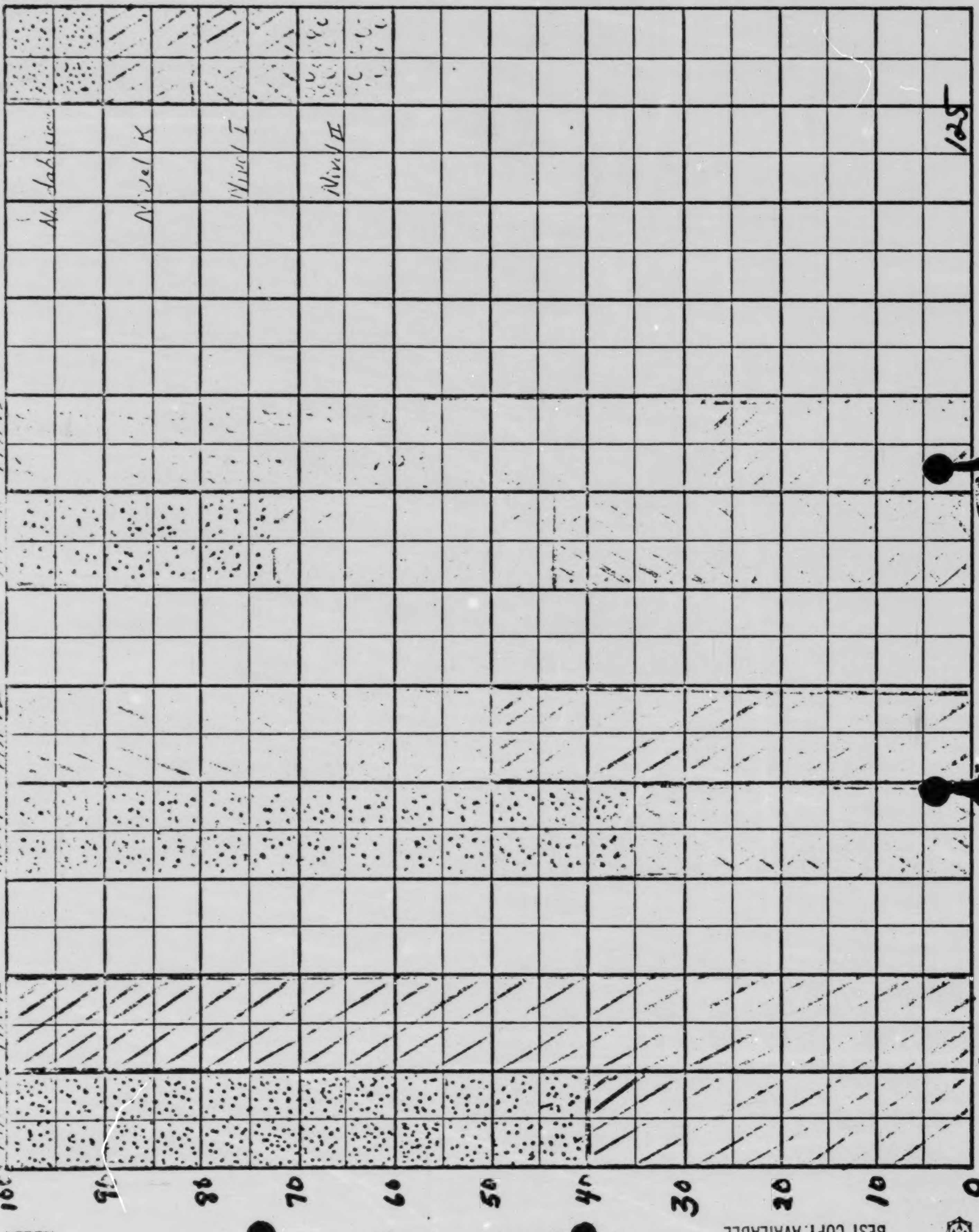
ESCUELAS	Septiembre 1971			Abril 1972		
	B Inst.	Instruc.	Indep.	B. Inst.	Instruc.	Indep.
Esc. Santa Rosa I	29%	51%	18%	16%	41%	41%
Mamey Centro	15%	68%	15%	5%	42%	52%
Frailes Alto	50%	0%	50%	25%	25%	50%
Camarones Centros	50%	27%	22%	22%	28%	50%
Piedras Blancas	47%	53%	0%	21%	58%	21%
Canta Gallo	6%	45%	48%	9%	36%	54%
Sonadora Alta	35%	35%	30%	11%	23%	64%
TOTAL	232	270	183	109	250	332
Promedio de Ejecución	34%	39%	27%	16%	36%	48%

APPENDIX # 3

SCIENCE SITUATION

COMPARATIVE CHART BY LEVELS

1970 - 71 1971 - 72


Nivel K
Nivel I
Nivel II
1971-72
1970-71
1971-72
0
10
20
30
40
50
60
70
80
90
100

125

APPENDIX # 4

WORK OF LANGUAGE ARTS RESOURCES

MOBILE UNIT OF EDUCATIONAL EXPERIENCES

LAW 91-230 Title III Project 10

Statistcs on Visits Made Years 1971-72

Areas of Language Arts

SCHOOLS	No. of Visits	TEACHERS	VISITS	
Camarones Centro	9	Luisa Torres	5	
		Alma Varela	17	14
Juana Ramos	7	Iris Padua	4	
		Dorinda Colón	4	
		Eva Martínez	3	
		Lydia Rivera	3	14
Mamey Centro	10	Milagros González	2	
		María M Palmer	10	
		María Pérez	5	
		Carmen García	10	27
Sonadora Alta	10	Carmen Santiago	10	
		María del Carmen Gómez	6	16
Piedras Blancas	6	Alba Descartes	6	
		Abigail Vázquez	4	10
Jagueyes	4	Eunice Centeno	4	4
Santa Rosa I	6	Lydia Ríos	6	
		Lydia Rodríguez	6	
		Carmen Pastor	4	
		Evelyn Irizarry	1	17
Santa Rosa II	6	Ana Viola Soto	6	
Frailes Alto	6	María Rojas	12	
		Vanesa Cordero	2	14
Canta Gallo	10	Elizabeth Valentín	10	
		Juanita Barreto	10	
		Carmen Pedraza	5	25

Total School visits

Average per school 7.0

Total visits to teachers 155

Average per teacher 6.2

ASPECTS

1. Readiness period
2. Diagnostic tests
3. Use of proper materials for readiness stage
4. Grouping
5. Use of textbooks and guides
6. Use of workbooks
7. Narration
8. New Spanish program areas, etc.

GROUP ORIENTATION 1971 - 1972

LANGUAGE ARTS AREA

Total orientations 6

Number benefited 79 teachers

Topics covered :

1.	New Spanish program	25 teachers
2.	Diagnostic tests, 1st. grade	8 teachers
3.	Diagnostic tests, 2nd. grade	10 teachers
4.	Reading with new approach in Spanish (Seminar in Bayamón)	2 teachers
5.	Creative writing	24 teachers
6.	Maintaining skills	10 teachers

Production of materials 1971 - 1972

1. Diagnostic tests for 1st. grade books
2. Bulletin of exercises for teaching skills in Spanish
3. Preparation of riddles to match animal pictures
4. Preparation of small book with phonetic levels of pre-primer and primer
5. Preparation of exercises emphasizing different consonant clusters
6. Preparation of comprehension exercises on selections not in texts

UNIT MOBILE OF EDUCATIONAL EXPERIENCES

LAW 91-230 TITLE III PROJECT 10

DEMONSTRATIONS IN LAGUAGE ARTS 1971-72

TOTAL DEMONSTRATIONS 18

ASPECTS COVERED IN THE DEMONSTRATIONS

1. Readiness period
2. Games (Veo, veo; Las Voces; El Cartero; Estoy pensando)
3. Writing names, lines, spacing between letters, words
4. Production of instructional materials
5. Introduction to vocabulary
6. Introduction to 1st. grade textbook

Teachingin team 1971-72 6

1. Grouping in reading with Sra Barreto - II grade
2. Grouping in writing with Sra. Santiago - I grade
3. Story telling with Miss Valentín - I grade
4. Grouping in reading with Mrs. Martínez - II grade
5. Story telling with Mrs. Rodríguez - I grade
6. Story telling with Mrs. Santiago - I grade

MOBILE UNIT OF EDUCATIONAL EXPERIENCES

LAW 91-230 TITLE III PROJECT 10

STATISTIC ON VISITS IN 1971 - 1972

AREAS : MATHEMATICS AND SCIENCE

SCHOOLS	VISITS	TEACHERS	VISITS
Camarones Centro	8	Luisa Torres	7
		Alma Varela	8
Juana Ramos	7	Iris Padua	5
		Dorinda Colón	5
		Eva Martínez	2
		Lydia Rivera	2
Mamey Centro	10	Milagros González	1
		María M. Palmer	10
		María Pérez	8
		Carmen García	9
Sonadora Alta	9	Carmen Santiago	7
		María del Carmen Gómez	9
Piedras Blancas	4	Alba Descartes	4
		Abigail Vázquez	4
Jagueyez	3	Eunice Centeno	3
Santa Rosa I	9	Lydia Ríos	8
		Lydia Rodríguez	8
		Carmen Pastor	5
		Evelyn Irizarry	1
Santa Rosa II	9	Ana Viola Soto	9
Frailes Alto	10	María Rojas	10
		Vanesa Cordero	10
Canta Gallo	10	Elizabeth Valentín	10
		Juanita Barreto	10
		Carmen Pedraza	7
Visits to schools	79	Total visits to teachers	162
Average visit per school	7.9	Average visits per teacher	6.48

ORIENTATION (Aspects included)

1. Exploratory visits to see the situation in areas of science and mathematics.
2. Visits to survey needs for determining orientation priorities.
3. Orientation to new teachers on science based on process.
4. Orientation to new mathematics teachers on use of the workbook, guide, text and synthesis.
5. Orientation on tests and tabulation of these in areas of science and mathematics.
6. Orientation on use of science lessons and planning
7. Orientation on use of science kits
8. Orientation on substitution of materials and activities
9. Orientation on placing pupils in terms of their problems (grouping)
10. Orientation on content and vocabulary in science and mathematics

GROUP ORIENTATIONS TOTAL PERSONS 25

1. Orientation to elementary school teachers and principals in the area of science (K-3)

   15 persons Ponce de León School
2. Orientation to new elementary teachers in the area of mathematics

   Second grade teachers (12 persons)

   Santa Rosa III

APPENDIX # 5

LIBRARY SERVICES

DEMONSTRATIVE DISTRICT OF GUAYNABO

MOBILE UNIT OF EDUCATIONAL EXPERIENCES - PROJECT NO. 10 LAW 91-230

Resume of Services to Teachers during 1970-71 and 1971-72

School and Teachers						Loan of equipment								Prepared by		Loan of Materials										Loans			Observations
	Enrollment	Grade	Orientation	Cooperation	Team work	Carrousel Projector	Slide Projector	Projector 16mm.	Projector Vertical	Tapes	Microscope	Record Player	View-Masters	Classroom teacher	Librarian	Films	Filmstrips	Diapositive	Transparencies	Globes	Maps	Records	Devices	Stereo-Pictures	Kits - Science	Stories	Reference	Professional	
1970-71	783	1-6	116	187	95	2	10	3	8	2	5	1	-	-	-	13	52	22	-	10	7	3	5	-	-	100	23	30	The kits were lent by Mrs. Llovet
1971-72	747	1-6	54	124	46	12	36	10	2	-	4	17	25	-	-	25	149	359	-	14	32	58	267	43	46	258	131	-	
	1530	1-6	170	311	141	14	46	13	10	2	9	18	25	-	-	38	201	381	-	24	39	61	272	43	46	358	154	30	

2 years

LIBRARY SERVICES BY THE MOBILE UNIT OF EDUCATIONAL EXPERIENCES

Date 1970-71 and 1971-72

ROUTE	SCHOOL	STUDENT SERVICES					OTHER SERVICES	SERVICES TO TEACHERS											OTHER SERVICES
		Orientation on how a library operates	Books loaned	Reference Consulted	Recreational reading	Story telling		Orientation on services	Teaching handling of equipment	Handling of equipment	Books	Tape-Recorders	Filmstrips	Films	Microscope	Projectors	Globes	Maps	
1	Rafael Hernández	322	25	127	20	3													
	Juna Ramos	167	67	54	70	3													
2	Santa Rosa III	214	63	78	18	8													
	Frailes Altos	140	120	105	120	5													
3	Camarones IV	344	30	71	41	2													
	Camarones Centro	175	159	140	152	5													
	Camarones Carretera	66	--	--	--	--													
4	Canta Gallo	481	163	254	228	9													
	Santa Rosa I	264	212	214	173	7													
	Santa Rosa II	49	35	35	35	6													
5	Sonadora Alta	322	540	620	466	9													
	Hato Nuevo	230	74	99	15	9													
	Mamey Centro	344	370	379	276	6													
6	Piedras Blancas	168	185	196	169	8													
	Jagueyes	79	63	37	53	3													
	Total	3365	2106	2195	1853	83													

APPENDIX # 6

Science : Needs Orientations

Legend of chart :

1. Orientation in the science program :

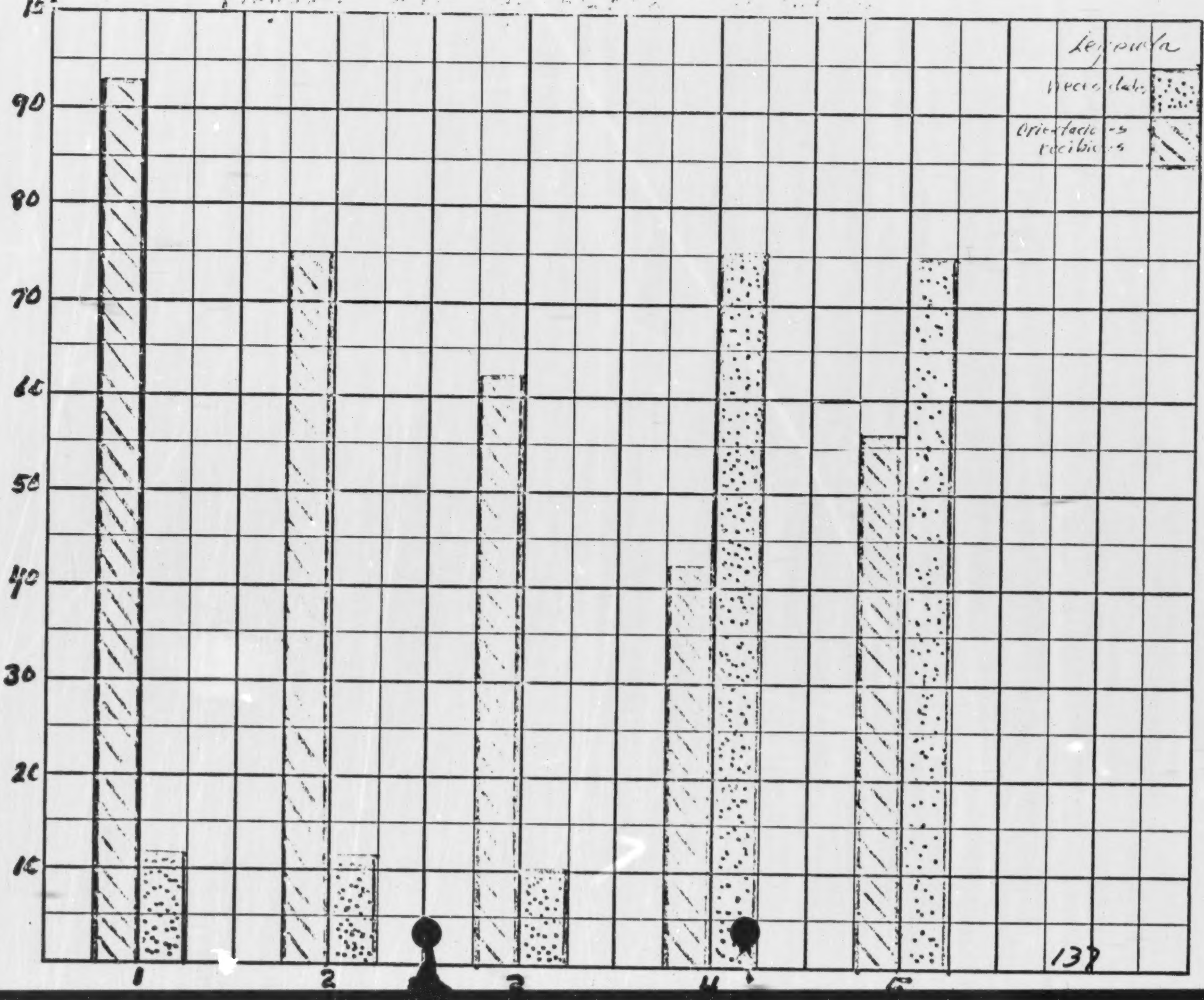
   An approach based on process

2. Orientation on content

3. Orientation on techniques

4. Orientation on preparation and use of materials to substitute for kits

5. Orientation on tests and other measurement instruments



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SCIENCE—A PROCESS APPROACH
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VALIDATION REPORT

Project #12 - Through certain guidance services to bring about behavioral changes that will result in better educational adjustments by pupils in rural elementary schools

VALIDATION REPORT
PROJECT #12 TITLE III
BARRANQUITAS SCHOOL DISTRICT

Through certain guidance services to bring about behavioral changes that will result in better educational adjustments by pupils in rural elementary schools.

I. Description

The El Portón Elementary Rural School in the Barranquitas School District has grades kindergarten to six with an enrollment of 321 pupils this current school year, 1972-73. The enrollment comes from different socio-economic sectors: El Portón, 37%; rural farming socio-economic deprived sectors, 29%; public housing, 24%; private housing, 7%; town, 3%.

At the end of 1968-69 there were socio-economic differences among the families of pupils enrolled in El Portón, which were reflected in the school work of the pupils and in the relations between school and community. The parents were not identified with the school and had a negative attitude toward their children's school work and school activities. At the same time the pupils revealed problems of attendance, health, undesirable habits in social relationships, increase in dropouts and others. This situation motivated the school personnel in Barranquitas to prepare a proposal under Title III, in which they aspired to offer guidance and counseling services that would take care of the fundamental aspects of human conduct: physical, economic, intellectual and emotional. These services would be directed toward determining the causes or influences that affected each of these components and would search for possible solutions to the problems or needs that contributed to the maladjustment of the pupils.

Positive changes in the pupils, parents and the general community would bring as a result more effective educational work and the consequent improved academic attainments.

This proposal was initiated in 1969, having now been in existence three years.

II. Objectives

The project aimed at succeeding in the following objectives:

a. Through offering counseling services to pupils in the rural elementary nucleus El Portón we could get

1. Pupils to enjoy a fuller student life if their social, economical, physical and emotional needs were taken care and to develop attitudes and habits favorable to better school work.
2. Teachers to develop interest and enthusiasm in taking care of the needs of these pupils and to be trained in work techniques that would tend toward overall improvement of the prevailing situation.
3. Parents and the community in general to understand the role they should play in the education of the children and to feel motivated toward working jointly with the school in its tasks.

III. Procedures used for validation

On recommendation of the Caguas Educational Region and the Division for Educational Evaluation and Development, the following persons were named to the Validation Committee:

Mr. Víctor Cartagena	Assistant Superintendent, Aibonito
Mr. Pablo Rivera	Superintendent, Cayey
Mr. Rafael Marcano	Evaluation Coordinator, Gurabo
Mr. José A. Ramírez Moyano	Regional Supervisor, Cayey
Mrs. María T. Aponte de Ortiz	Counselor, Aibonito
Mrs. María A. Berríos	Principal, Cidra
Mr. Emiliano Rivera	Social Worker, Comerío
Mr. José Santiago	Planning Official, Central Office
Mrs. Margarita Candelario	Principal, Caguas
Mrs. Rosalina Alamo de Arroyo	General Supervisor, Central Office

This team held two planning meetings where a validation plan 1/ was prepared in line with the achievements submitted by the district and in view of the evaluations made of the project.

The team worked out the following strategies:

1. Study and analysis of the Project #12, Title III, Barranquitas School District
2. Study, analysis and interpretation of achievements submitted by the District
3. Meetings of the Validation Committee to design questionnaires for parents and pupils and a check list for class observations
4. Three visits to the project to carry out the following validation strategies:

1/ See Appendix #1

a. Examination and analysis of documents presented an evidence of achievements claimed, among which were test results, statistics on attendance of pupils and teachers, student grades and failures, record of resources used, etc.

b. Administer questionnaires to a sample of parents and pupils

c. Classroom visits

d. Interviews with project personnel: school superintendent, principal, nurse, counselor, social worker, teachers.

e. Home visits

f. Interviews with Inter American University faculty

g. Analysis of costs and benefits

h. Identification, placement and use of equipment

i. Examination of creative work by the pupils

j. Discussion of findings with project personnel

During the time of validating Project #12, the team examined and analyzed the following documents:

1. Report of medical services offered pupils
2. Report of nursing services offered from August to December 1971
3. Creative work by pupils
4. Individual and group case histories of pupils under special attention from the social worker

5. Results from Spanish Reading Tests, 4th grade, 1970-71
6. Results of Spanish Reading Test, 4th grades, in rural school April 1971-72
7. Results of Achievement Tests in Science, Social Studies, Spanish and English, 6th grade, April 1971, Barranquitas District
8. Results of Achievement, Comprehension and Interpretation Tests in Spanish, April 1971
9. Student absences, 1970-71, 1971-72, 1972-73
10. Dropouts and transfers, 1970-71
11. Dropouts and transfers, 1971-72
12. Assignments, survey of teachers, February 12, 1971
13. Assignments, survey of teachers, November 15, 1972
14. Analysis of grades by percentages obtained by pupils in 1st to 6th grades in El Portón School at the end of school years 1969-70, 1970-71, and first semester 1971-72
15. Report on pupil grades, 1st to 6th grades, October 1972
16. Teacher absences 1970-71
17. Teacher absences first semester 1971-72
18. Failures 1971-72
19. Results of General Ability Tests, 4th grade, Schools of Barranquitas District, 1967-68 and 1971-72
20. Report on Educational Talks, 1971-72
21. Preliminary trimester grades by percentage in English, Spanish, Social Studies, mathematics and science, August to October 1972
22. Result of questionnairesgiven to parents in 1969-70 and 1972-73
23. Report on failures 1970-71

24. Letter from Mr. Miguel A. Alvelo Rodríguez, principal of the urban junior high school, to Mr. Rubén Vega, Superintendent of Schools, on evaluation of students coming from El Portón, Urban Elementary, and La Vega Schools, dated November 22, 1972

25. Letter from Mrs. Gladys Ruiz Anglada, General Supervisor of theater, to Mr. Pablo Mercado, Principal of El Portón School, in recognition for cooperation and participation in the Creativity in Drama workshop offered by the Fine Arts Program in El Portón School, dated October 10, 1972

26. Report on findings from selection tests (health) El Portón School, 1972-73.

VI. Results of validation

A. In the report of achievements submitted by the district, 13 were listed that could be verified by the validation team through strategies. Below we list each achievement with description and interpretation of the documentation used in the validation.

Achievement #1

Spanish reading tests given 4th grade in April 1971 had an average of 39.1, placing it very much above that of other schools in the district and of the Island average, which was 26.3 for rural zone and 31.0 for urban.

An analysis of documents verified that in the fourth grade Spanish reading test (interpretation and comprehension) given in all the district in October 1970, El Portón school placed 7th, 30.1, among the nuclei that took the same test. 2/

2/ See appendix #2

Results on the Spanish achievement test in April 1970 [3] to 3rd, 4th, 5th and 6th grades gave lower scores than in the other rural nuclei. Nevertheless, the achievement test given in April 1971 [4] showed superior achievement above all the elementary nuclei of the district.

This test, normalized, was administered to all the Island. Fourth grade pupils in El Portón had an average of 39.1, placing them above the district average of 30.22 in rural zones and of 31.60 in the urban and above that of the Island that was 26.3 for rural areas and 31.0 for urban.

Analysis of the documents confirmed the results given us were correct and the tests were administered in a reliable manner.

Achievement #2

Achievement tests for 6th grade in basic subjects placed El Portón above other district schools, and those of the region and of the Island except in English for which the highest average was 22.6. El Portón had 21.3, so slight a difference as to have little significance. Even then it was more or less equal to the rural average of 21.5

Subject	El Portón Average	Rural Average(Island)
Science	22.2	18.8
Spanish	27.8	24.3
Social Studies	28.6	23.1
English	21.3	21.5

At the beginning of the project El Portón was 1.1 below the rural average in English.

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[3] See Appendix #3
[4] See Appendix #4

On the basis of documents related to the results of the tests administered in April 1971 [5] this achievement was confirmed. The results show an achievement superior to other rural nuclei of the district in science, Spanish and social studies. The tests were administered in a reliable manner and persons giving the tests had been properly trained and were not employed in that school.

Achievement #3

The school has proved the public is beginning again to have faith in the rural public school. Pupils are being received from private schools, from other districts and from the urban zone.

Results of a questionnaire given to 19 parents of pupils coming from other schools of the district or other districts showed the following [6]

1. 84% of the parents had schools close to the home but they stated they sent their children to El Portón for the following reasons:
   a. additional services
   b. it is better than that in town
   c. pupils do better school work
2. 94% of the parents are not willing to change their children from the school, even though there were schools nearer to home, and some reasons were:
   a. safety
   b. services
   c. good teachers
   d. prestige

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[5] See Appendix #5

[6] Se Appendix #6A and #6B

A questionnaire given to parents by project personnel at the beginning of the project and again in October 1972 showed the following:[7]

a. In 1972 the attitude of 100% of the parents is more positive in terms of willingness to help solve school problems.

b. 91% think the school problems should be resolved by all, school and community

c. 95% of the parents want the school to be extended to junior high in the nucleus

d. 97% of the parents consider the school excellent

Evidence [8] existing on pupils coming from other schools shows the move has been in the three years of the project. In the years of 1969-70 to 1971-72, only nine pupils changed from other schools of the district or other districts to El Portón. During this year, 1972-73, 33 pupils have transferred to El Portón. Both the increase during the last year of the project and the fact these pupils came to El Portón having schools closer is significant.

Achievement 4

There has been a healthful change in attitudes as shown by: class attendance, assignments, academic achievement, creative work in all areas, cooperation of parents and pupils, dedication of teachers, special effort of custodial and school lunchroom personnel, physical and emotional environment of the classrooms and school in general.

7/ See Appendix #7

8/ See Appendix #8

Analysis of a comparative table on pupil attendance for 1970-71, 1971-72 [9] and 1972-73 [10] show the following:

a. A drop of 952 absences between 1970-71 and 1971-72

b. Up to October 1972-73, there has been a slight increase in absences by pupils but the principal pointed out the probable cause was highway construction in the Hoya Honda sector, which makes access to the school difficult, specially on rainy days.

c. During validation visits on December 7, 8 and 15, 1972, there was 95% attendance even though it was rainy.

This evidence was confirmed using attendance records for the years listed. The study of evidence on dropouts and transfers revealed that in 1970.71[10] there were four dropouts and 13 transfers, but in 1971-72 [11] there were no dropouts and only nine transfers. Attendance records support this fact.

In a survey made about assignments by teachers to the pupils in 1970-71 [12] and 1971-72[13] it was found that in 1970-71 64% always did homework assignments and in 1971-72[14] 86% always did assignments, or an increase of 22% who did their homework assignments. In 1970-71 nine percent never did their assignments but in 1971-72 only 1.4% never did assignments, a decrease of 7.6% of those who never did assignments. This was evidence of considerable progress in getting pupils to do their homework.

A questionnaire by the validation team to pupils on assignments showed that 57% of the sample (72) all or almost all did their assignments; 43% thought some of the groups do their assignments and no pupil thought it was a habit of the group not to do their assignments. During classroom visits it was possible to verify the fact of assignment preparations.

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[9] See Appendix 9
[10] See Appendix 10
[11] See Appendix 11
[12] See Appendix 12
[13] See Appendix 13
[14] See Appendix 14

A study of grade distribution in all subjects from 1969-70[15] to first semester of 1972-73 [16] showed that during the three years of the project the percentage of grades of A, B, and C had increased, while those of D and F had decreased.

There was evidence of creative work by pupils in poetry in Spanish, puppet theater, research projects, etc. These were delivered to the Division for Educational Development.

Parents have cooperated with the school in various ways: construction of fences and benches, donations for equipment such as a refrigerator, swings, etc., voluntary help in school operations as for example in the school lunchroom.

A questionnaire prepared by the validation team and given to a sample of pupils showed a high percentage were aware their parents cooperated with the school. Activities named by the pupils were basically meetings-55.5% and other activities 64.7%. [17]

A questionnaire prepared by the validation team and given to a sample of 72 pupils revealed 70.8% cooperated with the school and 75% thought all or almost all pupils were interested in keeping the school clean.[18]

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[15] See Appendix #15
[16] See Appendix #16
[17] See Appendix #14
[18] See Appendix #14

The principal said all teachers (100%) attended parent-teacher meetings, cultural programs, trips, etc. Interviews with teachers confirmed their attendance at these activities.

In the eight classroom visits made by the validation team evidence of the teachers' attitudes of understanding, attention to and cooperation with the pupils was observed as well as the pleasant emotional and physical environment in the rooms. The dedication of the teachers was another demonstration of this. 79% of the pupil sample said all or almost all of the pupils trust their teachers.[19]

The validation team could easily appreciate the cooperation from the school lunchroom employees and their efforts to keep the lunchroom clean and in order.

Achievement #5

El Portón School faculty had fewer absences than any other school in the district.

In studies at district level on teacher absences for 1970-71[20] and 1971-72[21] the teachers in El Portón had the lowest percentage of absences in the district. The 7.4% of absences per teacher in 1970-71 was reduced to 3.1% the first semester of 1971-72.

Achievement #6

The school has been selected as a Practice Teaching Center by Inter American University.

A member of the team interviewed Mrs. Jesusa Aponte, Director of the Barranquitas Regional College of Inter American University, and Mrs. Tomasita Colón, Supervisor of Practice Teaching. From these interviews it was learned the school was selected because it was a model school with the heterogeneous backgrounds of the pupils, the good preparation of the teachers, the good attitude of the principal and the teachers. Although other schools in the district had the requirements and it was easier to reach them, (in fact, they had been Practice Centers), El Portón was preferred.

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[19] See Appendix #14 [20] See Appendix #17 [21] See Appendix #18

Letters about their experiences as practicing teachers in El Portón school to the Director of the Practice Center for Inter American University and to the principal of El Portón will be sent to the Division for Educational Development in the Department of Education.

Achievement #7 and #8

1. The school won first prize at regional level for its Puppet Theater
2. It won first prize at district level for the Puppet Theater and for Poetry.

Of the 72 pupils in the sample, nine had belonged to the Puppet Theater and 48 had seen performances. Their opinion is that the theater is a good activity which they like. There has been an increase in those belonging to the theater under the Fine Arts Program, of 14 pupils in 1971-72 to 24 pupils in 1972-73.

The school has evidence of the prizes won in the contests at district, regional and central levels: first prize at district level in Puppet Theater and Poetry; first prize at regional level for the Puppet Theater; and in 1971-72, at central level, pupil Felipe Pérez won second prize in poetry and the Puppet Theater third prize.

Achievement #9

There is a much more positive attitude on the part of the parents and community in general toward the school.

A questionnaire prepared by the validation team and given to a sample of 51 parents[22/] showed the following:

a. 94% of the parents interviewed feel at home when they visit the school because: it has good teachers; they are well treated; they are offered transportation and other services; and they feel safe.

b. 59.9% of parents visit the school to attend meetings.

c. 80% visit the school to know how their children are behaving.

d. 57% think the teachers are more interested in the children now.

e. 84% think there have been real changes in the school during the past three years. They describe the school as very good, the best, good services, excellent and safe.

The parents have donated toward improving physical facilities of the school. Evidence of this is in the water fountain, swing for the kindergarten, encyclopedia for the library, equipment and uniforms for baseball and a refrigerator for the school lunchroom. Also, they built a fence and 12 benches of concrete.

There is evidence that of 126 parents, 114 attended one meeting. A total of 153 parents have visited the school during first semester of 1972-73.[23/]

[22/] See Appendix #6B

[23/] See Appendix #19

Achievement #10

1. The number of failures has dropped considerably.

A study of failures in El Portón School shows there were 6% in 1970-71[24] and 4% in 1971-72[25] or a decrease of 2%.

Achievement #11

1. Pupil and teacher experiences have been greatly enriched.

Classroom visits by the validation team showed teachers were using school resources of art and music to provide experiences in their different subjects.

There are albums of photographs about events actually experienced by the pupils, teachers and parents.

1. Poetry contest
2. Baseball games
   a. pupils
   b. teachers
3. Puppet contest
4. Trips
5. Educational talks by Dr. Cáceres
6. Educational films
7. Seminar on theater for pupils
8. Seminar on theater for teachers
9. Training on handling audiovisual equipment
10. Skills in manual arts developed by pupils
11. Individualized help to pupils
12. Group orientation on different topics by the social worker and the vocational counselor
13. Interviews with parents by social worker and vocational counselors
14. Orientation on health to students and teachers by nurse
15. The library helps in preparing assignments and other work
16. Celebration of annual Field Day
17. United Nations Contest prepared in the social studies class
18. Social and recreational programs at Christmas
19. Scientific Fair
20. Workshop on creativity in Fine Arts

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[24] See Appendix #20
[25] See Appendix #21

Documentation on comparative results of the General Ability test given to all district fourth grades in 1967-68 and 1971-72 [26] shows a significant increase in general ability of El Portón pupils. In 1967-68 El Portón 4th grade pupils had an average of 36.57% which placed them in fourth place among rural schools of the district. In 1971-72 the average was 49.8%, which not only placed them in first place among the district rural and urban schools but put them above the Island average for rural elementary schools of 42.1% and urban elementary schools of 48.9%.

The validation team considers this progress by 4th grade pupils in El Portón School very significant and believes the enriched experiences during the years of the project were one of the major factors contributing to this improvement in general ability by the pupils.

Achievement #12

1. Health conditions of the pupils have improved very much

A study of documents on health services provided pupils during 1970 to 1972 shows the following: general medicine, laboratory, dental, specialists. In general medicine 474 pupils received services; 173 had dental services; 371 had laboratory services and 42 from specialists.[27]

On studying case reports and interviewing the nurse, school personnel, parents and pupils we could confirm the effectiveness of the health services and the positive impact on school work and school-community relations. The nurse helps in medical clinics, home visits for giving notice of appointments and to orient the parents about these, for exploring home situations and orienting parents about treatments, give educational talks on health and perform the daily tasks of a school nurse.

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[26] See Appendix #22

[27] See Appendices #23, #24, #25

In the questionnaire for parents, they pointed out one reason for having their children in El Portón School was the efficient health services provided the pupils.

School personnel pointed out the great contribution health services had made to improvement in academic achievement by the pupils.

Achievement #3

1. Pupils going from El Portón School to the Urban Junior High have been outstanding in quality of school work and in behavior

The validation team interviewed the junior high principal and the counselor. Their opinion is that the academic work of pupils from El Portón has improved very much during the last two years. Their attitude is good. Only one pupil from El Portón has dropped out this year; this was because of financial problems. We verified that this pupil is working in a gas station.

A letter from Mr. Miguel A. Alvelo, principal of the urban junior high, to Mr. Rubén Vega, superintendent of schools, comparing the achievement and behavior of students coming from El Portón with those from other tributary schools will be sent as evidence to the Division of Educational Development, Department of Education.

An analysis of grade distribution (preliminary) for first semester of 1972-73 in the five basic subjects of seventh grade places those students from El Portón in first place in English[28], Spanish[29], science[30], and in second place in mathematics[31], and social studies[32], as compared with those from other district schools.

B. Project components that, on validation by the team, were judged transferable.

1. Counseling services at elementary level

The validation team believes the counseling services being provided are effective and have contributed to achieving the goals of the project. The effectiveness of these services was verified through the following strategies:

a. Interviews with the counselor at El Portón School and the one at the urban junior high, to which El Portón graduates go.

b. Interviews with parents, pupils and school personnel

c. Study and analysis of documents on counseling services at El Portón

    1) Annual reports on counseling
    2) Plan of Work for Counseling, 1972-73
    3) Records of interviews and results
    4) Folder on each pupil with information about: medical record, correlation profile; observations by teachers, and academic achievement.

    5) Followup studies on pupils going on to junior high
    6) Records on teacher training
    7) Records on orientation meetings with parents

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[28] See Appendix #26
[29] See Appendix #27
[30] See Appendix #28
[31] See Appendix #29
[32] See Appendix #30

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8) Records on home visits by the counselor and to community agencies
9) Records of group counseling services to pupils
10) Weekly plan of counselor

Counseling services have brought about much closer relations between pupils and teachers, faculty and the community and better use of school, district and community resources.

2. Nursing services assigned to a school

Nursing services have helped take care of health problems among pupils of El Portón. Improvement in health is reflected in better school attendance [33], superior academic achievement [34], and in the practice of desirable health habits.

Work of the nurse consists of: daily nursing services in the school, medical clinics, transmittal of appointments, followup on appointments and treatment, orientation to parents, educational talks and coordination of health services with the Health Centers and specialists in or outside the community.

The validation team verified the services of the nurse through documents on health services [35] and interviews with the nurse, parents, pupils, and school personnel.

3. Teacher aides with special skills

The teacher aides in El Portón School provide very effective services to the regular school program. They are selected on the basis of the special skills they have. This makes it possible for the aides, with the help of the teachers, to offer activities in art, music and physical education as well as being resource personsfor other subjects.

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[33] See Appendix # 9
[34] See Appendices 4, #15
[35] See Appendices #23, #24, #25

Interviews with teachers, the principals and pupils and direct observation of the work of the aides helped us to confirm their effectiveness in the regular school program.

C. Progress made by the clientele

After completing the validation strategies and comparing results with situations existing at the beginning and now, the team concluded the project was a determining factor in the progress attained by the clientele. Progress was verified in the following:

1. Academic achievement (See Appendices #4, #5, #15)
2. Integration of students from different socio-economic levels. This was confirmed by direct observations and interviews with pupils, parents and school personnel.
3. Health - Evidence studied showed quality services in health had been provided and had taken care of most health problems of the pupils. (See appendices #23, #24, #25)
4. Study habits, class attendance and attitudes. (See Appendices #14, #9, #10, #12, #13)
5. School-community relations. (See Appendices #6, #7, #19)
6. Dedication and efficiency of teachers in the learning-teaching process. This was confirmed by direct observation during classroom visits where effective use of techniques and procedures and the preparation and use of illustrative materials were seen.
7. The physical and emotional environment of the school was also observed in classroom visits.

8. Communication between, cooperation with and understanding by parents from different socio-economic levels was confirmed by visits to the homes of pupils.

V. Cost analysis and benefits

Mr. Santiago and Mr. Serrano are in charge of this part of the Report.

VI. Check list

See Appendix #31

VII. Recommendations and general conclusions

A. Conclusions

1. Mr. Pablo Mercado, Principal of El Portón School, and his faculty have been successful in the following objectives of the project:
    a. Pupils have improved remarkably in academic achievement, health conditions, study habits, class attendance and attitudes toward the school and their fellow pupils.
    b. Evidence shows the parents and the community are interested in the work of the pupils and the general functioning of the school. The cooperative attitude toward the school is unusual and relations of these with school personnel is very positive.
    c. Teachers have received training to prepare them for effective teaching performance. They show a knowledge of their pupils and ability to take care of their needs.

d. Teacher aides with special abilities have helped to increase school offerings and to make the school work more attractive to the pupils.

e. Use of audiovisual equipment has helped to make teaching more effective and school personnel shows skill in using it.

f. Counseling, social work and health services have been determining factors in the success of the project. A coordination of these three has contributed greatly to satisfying the needs of the clientele at the beginning of the project.

g. Health services are effective. Parents affirm this is an additional atraction for keeping their children in the school.

h. Physical facilities have improved during the three years of the project. Parents state the site of the school offers safety to their children.

i. Project personnel have produced teaching materials that can be used by teachers in the system.

B. Recommendations

1. Counseling services in the elementary school should be adopted by the system. This project has proved its effectiveness at elementary level. The Barranquitas School District has extended the service to four elementary schools using the resources of the district.

2. The services of a nurse assigned to the school should be adopted by the regular system. This project has demonstrated the relations between good health services and improvement in school work.

3. Teacher aides with special abilities should be used in the system. In selecting them, the possibility of their entering a university should be considered.

4. Social workers should organize community projects in those schools having pupils from culturally deprived areas.

5. The schedule in those elementary schools having the facilities should include a library period. This period should be a cooperative effort of teachers and librarian. Schools with library facilities should extend the services additional hours beyond the school schedule for benefit of pupils and community. Community resources could be used for this purpose.

6. Other district schools as well as those in all the system should benefit from the successes of this project. Information on the project should be disseminated through reports, bulletins, orientations, films, etc. so that areas with situations similar to that of El Portón can adapt the project.

7. If this proposal cannot be extended, we recommend funds be assigned to El Portón School to pay a counselor, nurse and three teacher aides with special abilities. This would give continuity to the successes already attained.

ADDITIONAL INFORMATION

1. Materials produced in the Project
    A. Pamphlets
        1. Knowledge of the child
        2. Development of skills
        3. Songs for elementary school
        4. Games for elementary school
    B. Bulletins
        1. Knowledge of the child
        2. Teaching writing skills
        3. Devices for reading
        4. Failures and school retention
        5. Plan for improving oral expression and written work
        6. Samples of questions
    C. Newspaper
        1. Voice of El Portón School
2. Creative work
    a. Poetry in Spanish
    b. Research projects
3. Letter from Mr. Miguel Alvelo, Principal of Urban Junior High School, to Mr. Rubén Vega, Superintendent of Schools, in relation to evaluation of students coming from El Portón, Urban Elementary and La Vega Schools.

Answers to questions on pages 6, 7, 8 of the
Procedural Manual, Process of Validation

1. What components of the project are new, different in concept, practices, methods and/or in population?

   Counseling services at elementary level, a nurse assigned to the school fulltime and teacher aides with special abilities.

2. In what way, different from the traditional, are personnel, equipment, materials and/or environment used?

   The nurse and teacher aides are used differently. The nurse is assigned to one school only and offers her services in cooperation with the other personnel. The teacher aides have special abilities that they share in activities with the pupils besides being used as resources in the basic subjects.

3. In what way do the objectives of the project or the participants depart from the traditional?

   We do not consider the objectives depart from the traditional.

4. What components of the project are exemplary in their objectives, concepts, methods or practices?

   Health services are exemplary in the variety of services, treatment and systematic followup and the effective coordination of personnel in solving health problems.

5. In what way does the project show duplication is practical?

   The total project can be duplicated in those areas with problems and characteristics similar to those of El Portón School. The health services, counseling and teacher aides could be very effective in other areas.

6. What information about the project is available in the areas of design, operation and evaluation?

   El Portón School has evidence of the initial problems, how the project was instrumented during the three years, and copies of external evaluation carried out, which were sent to the Division for Educational Evaluation and Development.

7. Is the information available on the project properly documented? Observable? Demonstrable?

   The project information is properly documented. There is both observable and demonstrable information.

8. What was pupil performance at the beginning of the program according to data from the beginning?

   The initial data show the pupils had problems of adjustment, academic achievement, study habits, attitudes and relationships.

9. What information exists to show changes in clientele conduct?

   a. What instruments were used to determine changes?
   b. How were the instruments administered?
   c. Who administered the instruments?
   d. What measures were taken to insure the reliability of the instruments used and their results?

   The information collected, studied and analyzed by the validation team:

   a. test results
      interviews
      observation
      study of attendance, dropout and transfer records
      study of grades in basic subjects
      study of failures
      report on assignments
      questionnaires
      report on medical services
      report on nursing services
      case histories
      educational talks
      report on findings in selection tests

   b. oral and written

   c. Most of the instruments (tests) were administered by the district evaluation team. The questionnaires prepared by the validation team and the interviews with pupils and parents were the work of the social workers and the counselor who were part of the team.

d. Orientation of the validation team before visiting the project, so as to be completely informed on the project. Investigation of procedures used to gather evidence about the project. Representative sample of the population. Interviews were done by persons specially trained, social workers and counselor. Confirmation of evidence provided against sources of information where the evidence originated.

Appendix #1

MINUTES OF VALIDATION TEAM MEETING PROJECTS UNDER TITLE III, CAGUAS REGION

Date : November 9, 1972

Place : Caguas Educational Region Office

Chairman : Mr. Víctor Cartagena

Those present:

Mr. Cartagena	Assistant Superintendent, Aibonito
Mr. Pablo Rivera	Superintendent, Cayey
Mr. Marcano	Evaluation Coordinator, Gurabo
Mr. Mollano	Regional Supervisor
Mrs. Aponte de Ortiz	Vocational Counselor, Aibonito
Mrs. Berríos	Principal, Cidra
Mr. E. Rivera	Social Worker, Comerío
Mr. Santiago	Planning Official, Central Office
Mr. E. Serrano	Planning Official, Regional Office
Mrs. M. Candelario	Principal, Caguas
Mrs. R. Alamo de Arroyo	General Supervisor, Central Office

After the welcome and presentation of members, the chairman, Mr. Cartagena, addressed the group to explain the purposes of the validation and to set up the agenda of the day. This was decided on as follows:

1. Discussion of Manual on Procedures
2. Reading and discussion of the proposal, titled _Through certain counseling services to produce behavioral changes that will bring better educational adjustments in rural elementary school_.
3. Examine achievements submitted by the district.
4. Determine activities for validating these achievements.
5. Prepare a list of documents needed for carrying out the validation.
6. Prepare a schedule of work for the team.

After outlining the work for the day, the group proceeded to a reading and discussion of the Manual of Procedures and of the proposal itself. Concerning the proposal, it was decided: two aspects must be covered:

1. In validating the achievements, the proposal must be kept in mind always.
2. To indicate, in preparing the final written report, that the objectives are not presented in a measurable form, which makes validation difficult.

At the request of the group, Mr. Santiago read the two reports on external evaluation made of the project: one by Mr. Erasto Rivera Tosado and the other by Mr. Edwin Figueroa. After hearing the two reports it was pointed out that these presented achievements but they were not properly supported by evidence.

After some discussion, observations and expressions of opinion by members of the team, the following activities were outlined for the achievements submitted by the district:

ACHIEVEMENTS	VALIDATION ACTIVITIES
1. Spanish reading tests given to 4th grade in April 1971 showed El Portón had an average of 39.1, placing it very much above other schools of the district and above the Island average, which was 26.3 for rural schools and 31.0 for urban.	1.a. Examine report on 4th grade group for 1970-71 in terms of socio-economic level, background, achievement, etc.
	b. re-analyze test results of test cited.
	c. Give Spanish reading test to current 6th grade and measure results against norms for 6th grades.

ACHIEVEMENTS	VALIDATION ACTIVITIES
2. Achievement tests for 6th grade in basic subjects placed El Portón above other district schools, those in the region and the Island, except in English, for which the highest average was 22.6 and that at El Portón was 21.3, a not very significant difference and more or less that of rural schools, or 21.5.	2.a. Offer a battery of tests to a sample of 6th grade pupils and compare the results with the rural average.
3. The school claims the public is beginning again to have faith in the public rural school. Pupils are coming from private schools, from other district schools and from the urban zone.	3.a. Give a questionnaire to parents of pupils who have come from private schools, from other district schools or from the urban zone.
4. There has been a healthful change in attitudes as shown by class attendance, homework, creative work in all areas, cooperation from parents and pupils, dedication of teachers, efforts of custodial and school lunchroom personnel, physical and emotional environment in the classrooms and in the school in general.	4.a. Study attendance records kept by teachers from 1968-69 to verify class attendance b. Examine correlation profiles between general ability and achievement c. Give a questionnaire to a sample of pupils covering the following aspects: assignments, achievement, cooperation with the school, impact of activities developed in the project. d. Examine creative work of pupils e. Examine minutes of meetings f. Observe the physical and emotional environment of the school
5. The school faculty had fewer absences during the past school year than any other school of the district.	5.a. Study attendance records of teachers.

	ACHIEVEMENTS		VALIDATION ACTIVITIES
6.	The school was selected as the Practice Center by authorities of Inter American University.	6.a.	Interview IAU personnel and those in charge of practice teaching to discuss criteria used in making the selection.
7.	The school won first prize at regional level for its Puppet Theater.	7.a.	In the questionnaire for the pupils, determine the impact of the Theater. (The achievement offered evidence)
8.	The school won first place at district level for both poetry and Puppet Theater	8.	See above
9.	There is a much more positive attitude toward the school on the part of parents and community in general.	9.a.	Give a questionnaire to a sample of parents from different socio-economic sectors to learn about these attitudes.
10.	The number of failures is notably reduced.	10.a.	Examine statistics on failures.
11.	Pupil experiences have been very much enriched, as well as those of the teachers.	11.a.	Classroom visits with a check list prepared for this purpose.
		b.	Find out about teacher training and results of evaluations on this aspect.
12.	Health conditions of pupils have improved remarkably.	12.a.	Examine medical records and those of the nurse to learn the number of pupils identified as having health problems and who received attention.
13.	El Portôn pupils going on to the Urban Junior High have distinguished themselves for their academic work and their behavior.	13.a.	Interview counselor and social worker about these pupils.

Below is a list of documents requested from the district for carrying out the validation:

1. Cumulative records of pupils
2. Reports on pupil grades
3. Teachers' record books
4. Results of normalized tests administered in the project from 1968 to date.
5. Number of pupils who have transferred to the school and from where
6. Actual home location of current enrollment
7. Correlation profiles between general ability and achievement
8. Minutes of parent-teacher meetings
9. Attendance records on teachers of the district from 1968-69 to date
10. Reports on failures in school from 1968-69 to date
11. Records of nurse and doctor
12. Followup study of pupils going on to junior high school
13. Local evaluation reports and copy of documents used for the evaluations
14. Reports by project personnel

As the last two activities of the day, the group prepared the following schedule for carrying out their work and assigned responsibilities to the different members.

Work Schedule:

Date 1972	Activity
November 21	Team meeting

December 1	Tests administered to pupils
December 7 and 8	Team visits to Barranquitas
December 13	Team meeting
December 15	Team visit to Barranquitas

Member Responsibilities:

1. Questionnaire to pupils	Santiago and Alamo
2. Questionnaire to parents	Emiliano
3. Gather documents	Serrano
4. Design check list	Toñita

5. Locate evidence for questions in the Manual on Procedures:

1-5	Margarita, Emiliano and Toñita
6-9	Pablo Rivera and Rosalina
10-13	Serrano and Santiago

At the next team meeting the instruments proposed will be examined.

Rosalina Alamo de Arroyo
Secretary
November 14, 1972

APPENDIX #2

Barranquitas School District
Barranquitas, P. R.

Spanish Reading Test - IV Grade
October 1970

Elementary Schools

School	:	Average
La Torre	:	37.1
Urban Elementary	:	37.0
Cañabón	:	36.8
Palo Hincado	:	34.2
Helechal	:	32.5
Quebradillas I	:	30.4
El Portón	:	30.1
Farallón	:	30.0
La Loma	:	28.4
La Vega	:	28.2
Lajitas	:	25.7

Achievement Test
April 1970

Understanding and Interpretation
Spanish

School	Per cent of Effectiveness			
	III	IV	V	VI
Urban Elementary	75	77	80	81
Farallón	70	68	74	70
La Vega	67	75	78	76
Palo Hincado	67	69	71	67
El Portón	62	65	69	62
Helechal	60	66	65	64
Quebradillas I	60	63	61	63
Cañabón	58	61	64	62
La Loma	56	61	57	59
Lajitas	54	60	52	60

APPENDIX #4

Spanish Reading Test - IV Grade
Rural Schools

April 1971

School	Average
El Portón	39.1
Farallón	36.1
Urban Elementary	34.8
Helechal Second Unit	33.0
Palo Hincado	31.2
La Vega	28.4
La Loma Second Unit	28.2
Cañabón	26.6
Qubradillas I	25.0
Lajitas Second Unit	22.6
District Average	Rural 30.22 Urban 31.60
Island Average	Rural 26.3 Urban 31.0

APPENDIX # 5

Achievement Tests - Science, Social Studies, Spanish, English - VI Grade
April 1971

School	Science	Spanish	Soc.Studies	English	Mathematics
	Average	Average	Average	Average	Average
S.U. Lajitas	17.9	23.2	23.4	19.6	
El Portón	22.2	27.7	28.6	21.3	
Farallón	16.6	21.8	20.4	22.6	
Qda. Grande I	19.2	26.0	22.6	22.2	
Helechal	21.1	26.4	22.6	21.9	
La Loma	17.0	25.2	21.2	21.0	
Palo Hincado	19.3	26.5	24.4	22.7	
Rural Average	18.8	25.2	23.1	21.5	

Questionnaire to parents of children from other schools who are now benefiting from the guidance project in El Portón School, Barranquitas

I- Identification Resume 19 parents

Student name ________________ Grade ________ No________

Residence ________________

Name of parent ________________

II-Questionnaire

1. What school in the Barranquitas district did your children go to before enrolling in El Portón?

   ___4___ a- Urban public school

   ___3___ b- Rural public school

   _______ c- Private School

   ___7___ d- Not applicable

2. What school in another district did your children go to before enrolling in El Portón?

   ___3___ a- Urban public school

   ___4___ b- Rural public school

   ___2___ c- Private school

   _______ d- Not applicable

3. Is there another school near your home where your children can go?

   ___16___ Yes

   ___3___ No

4. If the answer is "Yes", why do you send them to El Portón

   ___4___ a- Students do better work

   ___3___ b- The school is prettier

   ___4___ c- It is better than the town schools

__________ d- It offers other services that town schools and others do not have

__________ e- Others:

Parents work nearly	5
It's closer	3
It has transportation	3
It's safer	2
Better teachers	1
Schedule	1
Child likes it better	1

5- If you had a chance to change your children to a town school, would you be willing to do so?

__1__ Yes

__18__ No

6- Give two (2) reasons for your answer

a. __________

b. __________

Safety	8
Member of the family lives nearby	4
Good teachers	4
Transportation	3
Better reputation	3
Medical services	2
Services	2
Children improve their attitudes	2

APPENDIX #6 B

Questionnaire to Parents of Students in the Project on Guidance Services, El Portón School, Barranquitas

A. General information on parent or guardian

1. Last name, First name

2. Sex a. M 22 b. F 29 Total 51

3. Residence

17 a. Housing development 4 d. Quebradillas

18 b. El Portón 1 e. Barrancas 2 Hoya Honda

4 c. Urb. San Cristóbal 2 f. Town 1 Aibonito

4. No. of children you have in El Portón School

No. of children

1	2	3	4	More than 4
18	15	11	3	4

5. Grades in which the children are enrolled

K	1	2	3	4	5	6
9	20	20	14	16	19	13

B. Information related to or your relation to the school

1. Do you enjoy visiting El Portón School?

48 Yes No Do not visit 2

2. Why do you like, or not like, to visit the school?

Good teachers	-20
Good treatment	-14
Services	- 7
Safety	- 4
Discipline	- 4
The best	- 3
Physical plant	-1
Transportation	-1
Like a private school	-1
Give in formation on the children	-1
Total	56

3. How often do you visit El Portón School ?

___6___ a. daily

___2___ b. two or three times a week

___8___ c. weekly

___11___ d. monthly

___4___ e. once a semester

___8___ f. once a year

___2___ g. never

___11___ Other

4. Which of the following reasons do you have for visiting El Portón School? Indicate the two (2) most important

___27___ a. To attend meetings

___41___ b. To know how my child is behaving

___14___ c. To know how the school functions

___10___ d. To help in the school

______ e. To complain

___2___ f. To enjoy the activities they have

___4___ g. To feel a part of the school

___2___ h. Others

5. Have you noticed any change in El Portón School in the last three years?

___43___ Yes ___3___ No

6. If the answer is "Yes" which of the following?

___13___ a. Teachers absent less often
___16___ b. School is cleaner
___29___ c. Teachers are more interested in the children
___7___ d. There are more activities for the parents
___8___ e. Parents are more welcome
___8___ f. Meetings held help us as parents
___13___ g. Others

7. What is your opinion of El Portón School?

The best	13	Wonderful	2
Very good	22	Model	2
Good services	11	Stupendous	1
Safer	5	Marvelous	1
Best teachers	2	Perfect	1
Excellent	3	Well administered	1
Extension of grades	10	Should be put in all P. R.	1
		Total	75

8. Observations

Questionnaire to Parents

Area	1969-70	1972-73
Everyone helps resolve problems	77%	91%
Concern for welfare of barrio	67%	82%
Always ready to help	60%	100%
Concern for conduct of the youth	67%	92%
Always attend school meetings	5%	78%
School problems resolved by the community	72%	91%
Concern about illness in the family	70%	92%
Ask help when needed	15%	71%
Cooperates a lot in cooperative work	27%	69%
Help and guidance are provided to make the child happy	51%	97%
Plans to continue living in the neighborhood	44%	79%

Area	1969-70	1972-73
It is a good neighborhood	87%	98%
Knows almost everyone in the barrio	89%	100%
The school does good work	98%	-
School does very good work	0	100%
Thinks school services are good	98%	-
Thinks school services are very good	2%	98%
Has nothing to do with the school in any way	1.5%	0
Rates as very good what his child learns in the school	0	100%
Very good school-community relations	3%	89%
Rates the school as excellent	-	97%
School offerings increased	-	95%
Would change children to this school	-	95%
Would enroll other children in this school	-	95%
Has observed changes	-	100%

APPENDIX #8

Pupils coming from other schools of the district or other districts who have been enrolled in El Portón School from August 1969 to December 1972

Year	Elem. Urb.	Quebradillas	Palo Hincado	Barrancas	Quebrada Grande	Helechal	Other districts	
							Private	Public
69-70		4		1				
70-71								
71-72							4	
72-73	9	13	4	1	4	1		1

STUDENTS ABSENCES

Month	1970-71	1971-72	1972-73	Observations
August	34	9	12	
September	242	147	175	
October	342	149	220	
November	288	182		
December	232	117		
January	221	122		
February	200	96		
March	183	103		
April	237	126		
May	76	22		
Total	2025	1073		

APPENDIX #10

Dropouts and Transfers

Date: 1970-71

Grade	Enrollment	Actual Attendance	Dropout Sex and codification		Transfer Sex and codification	
			M	F	M	F
K	25	23			1 B_{13}	1 B_4
I	52	50		1 B_8		1 B_3
II	51	48			1 B_{13} 1 B_3 1 B_2	
III	46	45				1 B_2
IV	31	29		1 B_8	1 B_2	
V	60	56	1 B_8	1 B_8	1 B_1	1 B_{13}
VI	21	19				1 B_{13} 2 B_2
Total	282	270	1	3	6	7

Dropouts and Transfers

Date: 1971-72

Grade	Enrollment	Actual Attendance	Dropouts		Transfers	
			Sex and codification		Sex and codification	
			M	F	M	F
K	26	27				
I	50	45			1 B_{13}	2 B_4 2 B_{13}
II	52	51				1 B_{12}
III	48	45			2 B_2	1 B_2
IV	48	48				
V	32	32				
VI	57	58				
Total	313	304	0	0	3	6

ASSIGNMENTS 1970-71

Date: February 12, 1971

Grade	Enrollment	No. of pupils doing assignments		
		Always	Occasionally	Never
First	52	38	8	6
Second	51	30	20	1
Third	46	22	15	9
Fourth	31	21	9	1
Fifth	60	37	18	5
Sixth	21	18	2	1
Total	261	166	72	23
		64.0%	27%	9%

APPENDIX #13

ASSIGNMENTS 1971-72

Date: November 15, 1972

Grade	Enrollment	No of pupils doing assignments		
		Always	Occasionally	Never
First	50	44	5	1
Second	51	44	7	0
Third	52	48	4	0
Fourth	50	36	11	3
Fifth	53	46	7	0
Sixth	34	32	2	0
Total	290	250	36	4
		86.2%	12.4%	1.4%

APPENDIX #14

Questionnaire to Students in the Project on Guidance Services, El Portón School Barranquitas

A. General information on Student Resume

1. Last Name, first name

2. Sex M 34 F 38 Total 72

3. Age on last birthday

6	7	8	9	10	11	12	13	14
		2	17	20	15	12	3	3

4. Grade

1	2	3	4	5	6
			28	23	21

5. Location - Home

23 Housing development
2 Urb. San Cristóbal
Barrancas
26 El Portón
4 Quebradillas
3 Town
10 Hoya Honda
2 Palo Hincado
1 Aibonito
La Torre

6. Teacher

B. Information about different aspects of the school

1. How long have you gone to this school?

1 year - 6
2 years- 5
3 years- 5
More than 3 - 55

2. Have you noticed any difference in the school from three years ago and now?

Yes 65
No 7

3. What are the good things in the school?

Resources 25
Teachers 26
Rooms 26
School lunchroom 14
Library 21

4. What things don't you like?

They fight 6
Call names 3
Write on the walls 5
Misbehave 8

5. Why are you in this school? (See page 4)

6. Are you happy in the school?

Yes 70 No 2

7. Could you tell me if you have seen the things I'm going to read you in your classmates? (A card with the following key is given the pupils)

A. All or almost all
B. Half of them
C. Some
D. It isn't a habit of the group

			A	B	C	D	Total
1.	They do their assignments	☐	28	13	31	0	72
2.	They like school	☐	43	4	4	0	51
3.	They cooperate with the school	☐	51	7	14	0	72
4.	They trust their teacher	☐	57	2	13	0	72
5.	They are interested in what the teacher teaches them	☐	42	3	6	0	51
6.	They are interested in keeping the school clean	☐	54	1	10	0	65
7.	They go to school regularly	☐	16	4	8	0	28
8.	Their parents cooperate with the school	☐	48	4	18	1	71

8. I understand this school has organized a puppet theater

   a. Do you take part in this activity? Yes 9 No 63 Total 72

   b. Have you seen some performances of the puppet theater? Yes 48 No 24 Total 72

   c. What do you think about the activity? (See attached sheet)

9. Perhaps at home your parents talk about the school. Can you tell what they think about it? (See attached sheet)

10. Can you think of some things (activities) your parents have done to cooperate with the school?

    Meetings 40

    Activities 46

5. Why are you in this school?

	Reasons	Fourth	Fifth	Sixth	Total
1.	Safety	1	1	1	3
2.	Physical facilities	1	1	0	2
3.	Teach more	1	1	3	5
4.	Closer	9	6	5	20
5.	Parents prefer	4	2	0	6
6.	Likes it	9	3	1	13
7.	Belong here	1	0	1	2
8.	The best	1	4	0	5
9.	It's good	1	0	4	5
10.	Brothers and sisters go here	0	2	0	2
11.	Services offered	4	0	0	4
12.	Better teachers	1	1	2	4
13.	Have sports	0	2	0	2
14.	Parents work near here	0	1	2	3
15.	Provide transportation	0	1	1	2
16.	Study better	0	1	0	1

8. What do you think about this activity

Good -24
Interesting - 11
Funny - 6
Entertaining - 6
it teaches - 3
I like it - 4
Organized - 1
Favorable - 1
Likable - 1
Attractive - 1

Total 58

9. What do your parents think about El Portón School?

Good - 34
Attractive - 8
The best - 8
Good teachers - 6
Teaches a lot -5
Has facilities - 3
They like it - 2
Clean - 2
Should teach more grades - 2
Happy - 1
Safe - 1
Trust it - 1

Total 73

ANALYSIS BY PERCENTAGE OF PUPIL GRADES IN 1ST. TO 6TH. GRADES OF EL PORTON SCHOOL AT THE END OF SCHOOL YEARS 1969-70, 1970-71 AND FIRST SEMESTER 1971-72

	GRADES														
	A			B			C			D					
SUBJECTS	69-70	70-71	71-72	69-70	70-71	71-72	69-70	70-71	71-72	69-70	70-71	71-72	69-70	70-71	71-72
Spanish	20	12	22	28	36	32	29	23	30	20	25	14	3	4	2
English	14	10	22	26	27	29	28	39	28	23	20	17	9	4	4
Mathematics	15	14	15	26	34	32	32	29	36	23	16	14	4	7	3
Science	12	16	24	34	32	34	41	37	27	12	14	13	1	1	2
Social Studies	14	14	18	30	36	36	34	27	33	19	20	12	3	3	1

REPORT ON PUPIL GRADES

School: El Portón

Teacher: ______________

Grade: First to Sixth

Date: October 15, 1972

___ 1st sem. ___ 2nd sem.

SUBJECTS	Grades				
	A	B	C	D	F
Spanish	37	92	123	30	9
English	45	76	130	32	7
Mathematics	41	106	110	27	5
Sciences	59	88	110	27	5
Social Studies	51	90	115	33	1
Industrial Arts					
Home Economics					
Others (specify)					
Totals	233	452	588	149	27

APPENDIX #17

TEACHERS ABSENCES - 1970-71

School or Sector	Average of absences per teacher
Urban Elementary	19.0
Helechal	12.5
Junior High	12.3
La Loma	12.0
Pedro Laboy	12.0
Quebradillas	11.7
Senior High	11.0
Palo Hincado	10.9
Lajitas	10.3
La Vega	9.4
El Portón	7.4

APPENDIX #18

TEACHER ABSENCES - 1971-72

First Semester

School or Sector	Average of absences per teacher
La Vega	8.4
Senior High	8.1
Palo Hincado	8.0
Helechal	8.0
La Loma	6.5
Elementary	6.0
Lajitas	5.9
Urban Junior High	5.2
Pedro Laboy	4.9
Quebradillas I	4.0
El Portón	3.1

PARENT VISITS TO EL PORTON SCHOOL
Barranquitas

August - December, 1972

Grade	Number of Visits
First	27
Second	24
Third	29
Fourth	22
Fifth	34
Sixth	17
Total	153

APPENDIX #20

Failures

Date 1970-71

Grade	Enrollment	Actual Attendance	Failures M	Failures F	Failures Total	Cause
I	52	50	3	2	5	Frequent absences, sickness, accidents, poor achievement and family problems.
II	51	48	2	0	2	
III	46	45	2	1	3	
IV	31	29	2	1	3	
V	60	56	2	1	3	
VI	21	19	0	0	0	
Total	251	247	11	5	16	

FAILURES

Date: 1971-72

Grade	Enrollment	Actual Attendance	Failures			Cause
			M	F	Total	
I	50	47	2	1	3	Poor achievement, sickness
II	52	51	1	2	3	" "
III	48	46	2	0	2	" "
IV	48	49	0	1	1	Poor achievement
V	32	33	1	0	1	Sickness
VI	57	59	0	1	1	Poor achievement
Total	287	285	6	5	11	

GENERAL ABILITY TESTS - RESULTS
IV - GRADE

School	1967 - 68	1971-72
Elementary	45.22 (1)	47.2 (2)
La Vega (Urban)	42.25 (2)	47.6 (1)
La Torre	40.70 (1)	47.0 (2)
Palo Hincado	38.09 (2)	41.5 (5)
Cañabón	37.13 (3)	34.09 (7)
El Portón	36.57 (4)	49.8 (1)
La Loma	35.95 (5)	36.2 (6)
Helechal	35.28 (6)	44.0 (4)
Farallón	32.08 (7)	44.6 (3)
Lajitas	31.95 (8)	33.6 (8)
Island Average	Urb. 44.49 Rural 38.89	Urb. 48.9 Rural 42.1

MEDICAL SERVICES TO PUPILS

Date: 1970-71

Grade	General Medicine	Services received		Specialist
		Dentist	Laboratory	
K	15	0	6	4
1	61	3	49	9
2	32	21	15	0
3	32	18	20	3
4	23	12	15	1
5	31	22	23	2
6	2	7	7	0
Totals	196	83	135	19

APPENDIX #24

MEDICAL SERVICES TO PUPILS

Date: First semester 1971 - 72

Grade	General Medicine	Services received		Specialist
		Dentist	Laboratory	
K	2	0	2	0
1	51	0	44	5
2	25	0	20	3
3	25	0	23	2
4	17	0	16	3
5	19	0	16	0
6	19	0	17	10
Totals	158	0	138	23

MEDICAL SERVICES TO PUPILS

Date: First semester 1972-73

Grade	General Medicine	Services received		Specialist
		Dentist	Laboratory	
K	3	3	2	0
1	40	24	34	0
2	28	15	22	0
3	20	20	11	0
4	5	14	5	0
5	12	10	12	0
6	12	4	12	0
Totals	120	90	98	0

Appendix # 26

PRELIMINARY GRADES FOR TRIMESTER BY PERCENTAGE

Subject: English **Grade:** VII

SCHOOL	A	B	C	D	F	TOTAL
Urban Junior High	----	----	50.0	33.0	17.0	100
Urban Elementary	4.3	12.9	48.4	30.1	4.3	100
La Vega	12.0	35.7	25.2	17.6	9.5	100
El Portón	7.6	34.6	31.0	23.0	3.8	100

Distribution of A, B and C was:

Urban Junior High--------- 50.0%
Urban Elementary --------- 65.0%
La Vega ----------------- 72.9%
El Portón---------------- 73.2%

Appendix # 27

PRELIMINARY GRADES FOR TRIMESTER
BY PERCENTAGE

Subject: Spanish

Grade: VII

SCHOOL	A	B	C	D	F	TOTAL
Urban Junior High	---	8.3	41.8	33.3	16.6	100
Urban Elementary	4.3	29.0	31.2	22.6	12.9	100
La Vega	12.0	26.1	19.1	33.3	9.5	100
El Portón	9.5	29.0	27.0	25.0	9.5	100

Distribution of A, B and C was:

Urban Junior High--------- 50.1%
Urban Elementary --------- 64.5%
La Vega ----------------- 57.2%
El Portón---------------- 65.5%

Appendix # 28

PRELIMINARY GRADES FOR TRIMESTER BY PERCENTAGE

Subject: Science

Grade: VII

SCHOOL	A	B	C	D	F	TOTAL
Urban Junior High	---	----	25.0	41.7	33.3	100
Urban Elementary	2.2	12.9	35.5	24.7	24.7	100
La Vega	14.3	16.6	26.2	28.6	14.3	100
El Portón	13.4	23.0	29.0	29.0	9.6	

Distribution of A, B and C was:

Urban Junior High---------	25.0%
Urban Elementary ---------	50.6%
La Vega -----------------	57.1%
El Portón----------------	65.4%

Appendix # 29

PRELIMINARY GRADES FOR TRIMESTER BY PERCENTAGE

Subject: Mathematics Grade: VII

SCHOOL	A	B	C	D	F	TOTAL
Urban Junior High	---	---	25.0	41.7	33.3	100
Urban Elementary	21.1	22.6	35.5	25.8	14.0	100
La Vega	9.5	36.0	28.5	19.0	7.0	100
El Portón	5.8	15.4	50.0	17.3	11.5	100

Distribution of A, B and C was:

Urban Junior High---------	25.0%
Urban Elementary ---------	60.2%
La Vega -----------------	74.0%
El Portón----------------	71.2%

PRELIMINARY GRADES FOR TRIMESTER BY PERCENTAGE

Subject: Social Studies Grade: VII

SCHOOL	A	B	C	D	F	TOTAL
Urban Junior High	---	25.0	33.3	16.7	25.0	100
Urban Elementary	3.2	21.5	50.0	15.6	9.7	100
La Vega	9.5	26.2	45.2	16.7	2.4	100
El Portón	1.9	23.2	46.1	25.0	3.8	100

Distribution of A, B and C was:

Urban Junior High---------	58.3%
Urban Elementary ----------	74.7%
La Vega ------------------	70.9%
El Portón-----------------	71.2%

VALIDATION PROCESS

Check Sheet

Title : Through certain counseling services change behavioral habits that will better educational adjustments in elementary rural school.

District : Barranquitas Date: April 11, 1973

I. Indicate by a check mark in the proper column your rating of each area according to the scale:

0- Nothing at all

1- Unsatisfactory

2- Satisfactory

3- Outstanding

4- Excellent

AREAS	0	1	2	3	4
1. The strategies used in the project contribute to solve problem (s) identified in the study of needs				2	5
2. The project presents evidence to show the operational objectives were efectively reached				1	6
3. The project presents evidence to show the instruments used provide objective and reliable information				4	3
4. The project presents an analysis of cost-effectiveness that reflects a relationship between the costs and the performance of participants				7	
5. Analysis of cost-effectiveness indicates the project is practical (the money spent is justified by the product)				7	

AREAS	0	1	2	3	4
6. The project can be observed both visually and communicably				4	3
7. The project has concept or practices obviously original, unusual and exemplary				4	3
8. The project offers innovative procedures, techniques and practices that can be disseminated				5	2
9. The project has made a significant contribution to the educational system				2	5

Total 216 points
Sheets tabulated 7
Average 30.8

II. Explain your rating

Our classification is for the most part outstanding because we believe they have achieved the project objectives and there are aspects in it that can be transferred with great probability of success to other places with similar characteristics.

PERFORMANCE, PROPOSAL # 12

August 1971

Objectives	Activities	Criteria	Instruments
1. By offering certain specialized services in: a. Social work b. Counseling c. Health d. Fine arts e. Physical education f. Library It is expected at least 80% of the pupils in El Portón School will show evidence of: a. Average monthly attendance of 95% b. Better study habits as shown by: 1. assignments done 2. projects carried out 3. use of library 4. class participation 5. neater, better prepared work 6. others c. Desirable social interaction shown by:	1. Orientation of pupils and parents through meetings, talks and bulletins on: a. importance of school attendance b. purpose and benefits of homework assignments and projects c. importance and use of the library 2. Individual counseling to pupils and parents of pupils with attendance and homework problems 3. Investigate causes for chronic absences and failure to do homework 4. Discuss with teachers how they can help to improve attendance and performance on homework and projects. 5. Application of remedies, using all resources available.	1. Number of pupils who received counseling a. group b. individual 2. Number of meetings, talks and topics discussed 3. Bulletins produced 4. Percentage of pupil attendance 5. Number of pupils with problems of attendance and homework 6. Means by which the causes can be diagnosed 7. Evidence of remedies used 8. Ways of improving services of: a. libraries b. health c. social work d. counseling	1. Records of: a. attendance of pupils and teachers b. grades c. homework d. parents' visits to the school e. social work f. health g. counseling h. library 2. Group and independent correlation profiles 3. Attendance of parents and other community members at school activities. 4. Samples of work by school level and pupil level 5. Standard tests, tests constructed by teachers, principal or the district.

Objectives	Activities	Criteria	Instruments
1. Acceptance of companions 2. Spontaneous participation in groups, in recreational and social activities sponsored by the school or community 3. Observation of norms set up in the classroom, school and community 4. Observations of good manners within and outside the school.	6. Formulation of a colateral plan for better use of the library 7. Establishment of uniform norms on the form for presenting written work 8. Enrichment of the library with the following materials: a. film strips and films b. curriculum in the different subjects c. diapositives d. listening centers e. tapes f. others	9. Means used to improve academic achievement	6. Study of comparative statistics on grades 7. Evaluation of teachers 8. Evaluation of project at district, regional and Central Office level
d. Cooperation in maintaining a good emotional and physical climate in the classrooms and the school in general as shown by: 1. Conservation of gardens, surroundings, classrooms, play areas library, school lunchroom and other facilities 2. Order and quiet in the school	9. Show sociodramas to demonstrate good manners 10. Celebration of social recreational and cultural programs.		
e. Progress in academic performance: 1. better grades 2. high correlation between	11. Construction of sociograms at classroom and school level to determine acceptance by pupils and the dynamics of the groups; interpretation of these and application of remedies.		

Objectives	Activities	Criteria	Instruments
general ability and general academic average 3. better individual performance in instructional tasks	12. Organization of committees and other groups for improving the emotional and physical climate of the school and its dependencies. 13. Preparation of regulations for the school. 14. Study of grades and correlation between % and academic average. 15. Preparation of individual profiles. 16. Preparation of individual case histories on progress.		
II In the course of implementing the proposal and through in-service training, 90% of personnel involved will show: a. Effective use of work techniques b. Better knowledge of the child in all aspects c. Acceptance of the child, regardless of his economic, social, religious or ethnic condition. d. More and better interaction with the community.	1. Inservice training of teachers to include: a. use of techniques b. subject matter content c. Development of skills d. knowledge of the child e. evaluation f. demonstration classes g. exchange of experiences h. microteaching	1. Degree to which teachers are aware of the characteristics and problems of the pupils. 2. Correlation between training given the teachers and progress shown by the pupils. 3. Degree to which teacher attitudes have changed. 4. Evidence of orientation given the teachers.	

Objectives	Activities	Criteria	Instruments
III. In the course of the project and through specially designed activities for the purpose, we expect that parents and the community will: a. actively participate in 70% of activities sponsored by the school. b. visit the school more frequently for purposes other than complaints	1. Hold meetings of parents by grades and general to: a. report on progress of the project b. plan educational, social, recreational, and cultural activities c. solicit their operation 2. Hold educational, social, recreational and cultural activities. 3. Have "Open House" for the parents. 4. Have contests. 5. Offer demonstration classes to parents. 6. Invite parents to give talks to pupils on topics they can discuss. 7. Organize voluntary committees of parents. 8. Organize a general Parents Advisory Council and councils by grade levels.	1. Number of meetings with parents. 2. Number of meetings with the community. 3. Amount of parent participation in school activities. 4. Use made by the community of existing school facilities: a. libraries b. play grounds c. classrooms	

Objectives	Activities	Criteria	Instruments
	9. Organize a mothers' club. 10. Give courses and talks on first aide to: a. teachers b. pupils c. parents		

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF EDUCATION
SAN JUAN REGIONAL OFFICE
HATO REY, PUERTO RICO

VALIDATION REPORT ON PROJECT NO. 13

CLOSED CIRCUIT TELEVISION

Date of visits : December 12-14, 1972

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VALIDATION REPORT ON PROJECT NO. 13

CLOSED CIRCUIT TELEVISION

Date of visits : December 12-14, 1972

Submitted by : Validation Team

1. Mrs. Virgenmina Zalduondo
   Superintendent of Schools
   San Juan Oeste

2. Mrs. Irmina Aldarondo
   Regional Supervisor of Evaluation

3. Mrs. Joyce Mathews
   Regional Supervisor of Music

4. Mrs. Selenia P. de Mercado
   Principal
   Santa Rosa Elementary School

5. Miss Iris A. Martínez
   Representative
   Coordinator for Title III

6. Mrs. Sylvia Rodríguez
   Teacher
   Caimary Elementary School

7. Miss Milagros Préstamo
   Teacher of Art
   Caimary Elementary School

VALIDATION REPORT ON PROJECT NO. 13

CLOSED CIRCUIT TELEVISION

I. DESCRIPTION OF PROJECT

Project No. 13, Closed Circuit Television, was developed in the Román Baldorioty de Castro Elementary School, Guaynabo Demonstration District, beginning in 1969.

The school has an adequate room that has been fixed up to provide the necessary services for a Closed Circuit Television System. There is a coordinator assigned under Title III and a teacher aide assigned by the district. Actually, the aide is offering the art class over the closed circuit, since the school has no such teacher. The work of these two people is to be highly commended.

Basically, the Closed Circuit Television has been used for music and art classes. The first is offered on a regular basis and offers experiences to all the school. To put the music program on the air, the music teacher works with the technician-coordinator and the teacher aide so that it is, in a sense, team work. The work being done in this field was easily observable, but that in art classes is just beginning and offered little to see.

Other programs put on the air are those related to different celebrations, such as Holy Week, Christmas and others that could not be observed.

II. OBJECTIVES OF PROJECT

Objectives to be developed during school year 1971-72 were :

1. to have 80% of all students participate in music classes,

2. to offer art classes to 100% of fifth and sixth grade students,
3. to offer 100% of third grade students practice in listening to and producing basic structures in English
4. to offer at least two special programs a month in line with particular interests of 100% of students
5. to offer 10 programs monthly for enrichment in social studies and science to 80% of students
6. to provide inservice orientation on techniques, content and materials in their particular areas to 80% of the teachers in the school
7. to provide 25% of the teachers with team teaching experiences

III. PROCEDURES USED IN VALIDATION

A. Strategies used

1. Techniques and methods used for gathering evidence
    a) Meetings of the Validation Committee to discuss and analyze the proposal, the district reports on achievements, work plan for 1971-72, request for continuation of the project and to plan the strategies to be followed in visits to the project.
    b) Visits to the Guaynabo Demonstration District
        1. Group interview in the superintendent's office with:
            a) local and Title III administrative personnel
            b) teachers and students from the school -

               3 teachers

               6 students

        - c) parents of students

            3 mothers

            1 father

        - d) project personnel

    2. Visit to Román Baldorioty de Castro Elementary School in order to :
        - a) observe development of project
        - b) examine materials produced
        - c) group and individual interviews with teachers
        - d) administer questionnaires to students
        - e) observe programs prepared for Holy Week, news program "How the world goes," and an English program.
        - f) classroom visits (See appendices for schedule of activities carried out)

B. Documents examined

1. proposal
2. record of circulation of materials and of services provided in 1972-73
3. report of work performed in 1971-72
4. catalogue of audiovisual resources
5. records of visits to the project
6. record of programs initiated in 1970-71
7. report of activities carried out in summary training
8. propaganda bulletin

9. charts

10. teachers' plans

11. scripts

12. pupils' workbooks

IV. RESULTS OF VALIDATION

A. Identified achievements that merit being transferred

1. materials produced for local programming

    a) scripts

    b) videotapes of music and art classes

    c) illustrated flip card series prepared for special occasions such as Holy Week

    d) collection of taped music for the social studies and other classes

These materials can be used by teachers in other schools where there is CCTV and also be an example of how to adapt ideas being used in other subjects of the curriculum.

2. use of CCTV as a strategy for greater and better use of available resources :

    a) music and art classes for all students by the art and music teachers from the TV studios.

    b) development of student talent and leadership through active participation in enrichment programs, such as the school news program

    c) use of other community resources and better use of time in activities that reach a greater number of students and teachers.

B. Progress attained by clientele

1. Music :

Students have acquired an extensive repertory and enjoy the music class. The work of the music teacher is outstanding. In the student questionnaire, 44 of 52 students stated they liked the music class. (See Appendix no. 2)

There is no evidence to support this claim of progress by students as no recording was kept of how students sang at the beginning of the project nor any questionnaire to show student aptitudes or interests in music.

2. Art

Students enjoy the art classes. Of 47 students interviewed, 45 stated they liked them. The art teachers work is outstanding. Here, again, there is no record kept of student progress in the different techniques developed in the televised program. (See appendix no. 3)

3. Academic achievement in general

Although 29 of 32 teachers interviewed pointed out that students had improved in attendance, in study habits and in general academic achievement, no concrete evidence was presented.

V. COST ANALYSIS AND BENEFITS

1969-70

Items:

Personnel full-time	$5,150.00
Personnel part-time	---------
Fringe benefits	520.00
Equipment	7,224.00
Materials	400.00
Other expenses	---------
Total	$13,294.00

Enrollment: 1,112 students

Cost per student: $13.26

1970-71

Items:

Personnel full-time	$5,820.00
Personnel part-time	1,940.00
Fringe benefits	1,028.20
Equipment	---------
Materials	555.89
Other expenses	1,000.00
Total	$10,344.09

Enrollment: 1,125 students

Cost per student: $9.19

1971-72

Items:

Personnel full-time	$6,600.00
Personnel part-time	1,940.00
Fringe benefits	1,145.00
Equipment	---------
Materials	500.00
Other expenses	500.00
Total	$10,685.00

Enrollment: 1,171 students

Cost per student: $8.83

VI. RESULTS OF CHECK LIST: AREAS

1. A study of needs shows the school is organized in different types of schedules and that it would like a change from the traditional types of instruction and to improve the quality of instruction. However, the teachers continue using traditional methods with exception of music and art. The school schedule does not provide time for teachers to plan nor for practice in new techniques of team teaching. No evidence was provided of improvement in instructional quality through academic improvement by the students.

2. Of the seven operational objectives only four were effectively achieved. The following objectives were not effectively covered :

   a) to offer practice in skills of listening and producing basic English structures to 100% of students. It was found no program was offered during the first year of the project and none in first semester of 1971-72. Only eight programs of the "English is Fun" series were offered to 167 second grade students in second semester, 1971-72. So far this year no English program has been given, since the resource person used before is now teaching in another school of the district.

b) inservice orientation on techniques, content and materials in their respective subjects to 80% of the teachers.

Two summer inservice sessions were offered in 1970 and 1971, but these were not based on needs of the teachers. Of 32 teachers interviewed, 21 expressed a need for training and more participation in the planning of activities. (See Appendix No. 4)

c) team-teaching experiences for 25% of teachers

No time is allowed teachers for planning team activities. What little coordination there is has been done outside of school time, at lunchtime, etc. The sacrifice and dedication of project personnel is really praiseworthy.

3. Evidence presented we found to be objective and reliable.

4. The cost-effectiveness analysis shows satisfactory relationship between costs and performance of participants, as project resource persons have performed their duties efficiently and the student body is satisfied and has benefited from the activities carried out.

5. Adopting a project of this kind is practical since the money invested is justified by the development of an enrichment program in terms of educational needs of a particular clientele. We know some schools have installed CCTV with contributions from the parents.

6. The project is visually and communicably observable.

7. Within limits this project includes the use of rather unusual strategies such as giving tests by using CCTV.

8. Procedures followed in developing this CCTV system, in so far as better use of resources, can be disseminated for the benefit of other CCTV systems.

9. This project has made a real contribution to education but not to the extent anticipated, since, while having great potential in human resources, equipment and materials did not arrive on time.

VII. RECOMMENDATIONS AND GENERAL CONCLUSIONS

1. Extend the programming to other curricular areas
2. Allow greater teacher participation in programming, study and analysis of units and in team-teaching. For this, there must be more flexible scheduling of school time through certain modifications in organization.
3. Edit and publish descriptive bulletins on use of the materials produced locally, as both quantity and quality of these is very good.
4. Better system for gathering evidence
5. Tape music and songs from the series of videotaped music programs to be distributed to other schools without a TV circuit or copy the

videotapes and lend them to other schools with CCTV to encourage an appreciation of music and to be able to enjoy in the not too distant future the wonderful experience of listening to an entire school singing together, as has happended through the development of Project No. 13.

APPENDIX # 1

SCHEDULE OF VISITS

PROJECT NO. 13 CLOSED CIURCUIT TELEVISION

First day ; December 12, 1972

Time	Activity	Personnel in charge of activity	Strategy	Documents consulted
8:30 - 10:30 A.M.	Meeting in office of Superintendent of Schools Persons present : School Superintendent Assistant Superintendent, Title III Representative Mrs. Virginia López Local Educational Planner School Principal Project Coordinator Resource teachers in art, music and English English zone supervisor Representatives of school faculty students parents members of the community	Mrs. Carmen Rosa Díaz de Ramos, General Supervisor of Educational Technological Program, San Juan Region, and Chairman, Validation Committee	Group interview by all members of Validation Committee: Mrs. Carmen Rosa Díaz de Ramos, Chairman Mrs. Virgenmina Zalduondo Superintendent San Juan Oeste Mrs. Joyce Mathews Regional Supervisor of Music Mrs. Selenia Pumarejo de Mercado Principal Santa Rosa Elementary School, Bayamón Sur Mrs. Silvia Rodríguez mathematics teacher Caimary School Miss Milagros Préstamo art teacher Caimary School	

Time	Activities	Personnel in charge of activity	Strategies	Documents consulted
			Miss Iris A. Martínez Arroyo, Instructional Programs Analyst, representing Title III Coordinator Mrs. Irmina Aldarondo General Supervisor of Evaluation	
			1. Observe CCTV facilities	
			2. Discuss and analyze school organization before and after operation of project. How does the school organization provide for development of the project?	Records or charts : 1. teacher programs 2. time distribution 3. teacher attendance 4. mobility of teachers 5. mobility of students
10:30 - 12:00	Visit to Román Baldorioty de Castro School to observe facilities for developing project, to discuss school organization and coordination in planning of programming between project coordinator and school principal Persons present: School principal	Validation Committee in full	3. Analysis of program planning: A. Team planning before and after starting project B. Change of traditional role of teacher to that of team teacher 1. Project teacher coordinator with resources	A. Records of schedule for script production. Time spent on production of scripts. B. Interviews with teachers who worked with or are working with the project. C. Interview with Production Committee 1. schedule 2. production

Time	Activities	Persons in charge of activity	Strategies	Documents consulted
			2. Project teacher coordinator with resources and the teachers	D. Interview with persons who were in charge of developing programming
			3. Project teacher coordinator with resources, the teachers and the principal	
			4. resources with teachers.	
			C. Script production	
			D. Production of teaching materials for:	
			1. T. V. 2. Classrooms	
			4. CCTV Programming	E. Records or charts of:
				1. programs 2. schedule 3. log on transmissions
			A. By level of difficulty (elementary or junior)	
			B. Teacher orientation What changes have been made in the schedule to take care of the students?	F. Logs on time distribution

Time	Activities	Persons in charge of activity	Strategies	Documents Consulted
			C. Has more than one channel been used? How? D. How is programming provided for the 4-hour groups? Other groups?	
1:00 - 2:00 P.M.	Activity in Román Baldorioty School continued			
		Full Validation Committee		
2:00 - 3:30 P.M.	Group interview with school faculty	Miss Iris A. Martínez, Leader Committee members Observers and persons to transcribe meeting.	Group interview	To ascertain degree of participation in the project, attitudes, limitations, projections and impact of C.C.T.V.
Se[illegible]nd Day, December 13, 192 8:30 - 12:00 noon	A. Gather objective, concrete information on achievements of project in the district	Mrs. Zalduondo Mrs. Aldarondo Miss Martínez	Analysis of records and other documents of the project	1. Report on project development 2. Graphs 3. Tables, comparisons 4. Records of programming 5. Records on circulation of materials and requests from teachers 6. Materials produced 7. Catalogues 8. Others
	B. Observe videotaped			

Time	Activities	Person's in charge of activity	Strategies	Documents Consulted
	programs to see programs in English, art, music and social studies	Mrs. Mathews Miss Préstamo Mrs. Mercado Mrs. Rodríguez	After watching a program, it was analyzed for the following factors: Example: A. Having fun with Art. 1. How did the teacher plan for taking care of all the school? 2. When did she help with producing the script? 3. Who wrote the script? 4. What learning sequence does the program have with the other subjects? 5. What enrollment is directly taken care of in the program? 6. What purposes are the program aimed at?	

Time	Activities	Persons in charge of activity	Strategies	Documents Consulted
			7. Evaluative criteria used by the teacher to determine achievements? 8. What techniques used? 9. How was material provided for the program? 10. How does Educational Television fit into the art program? 11. How has it improved the quality of instruction? 12. Length of programs? 13. What projects did students produce? B. English Programs 1. Is the programming equal to an English class? 2. What kind of programs are produced?	

Time	Activities	Persons in charge of activity	Strategy	Documents consulted
			C. General Questions 1. Classification of programs: a) orientation b) direct teaching c) propaganda d) enrichment e) entertainment 2. Justification for using medium (C.C. T.V.) 3. Was there permission to show the films over C.C.T.V.? 4. For what purpose were the films used? 5. Others	
1:00- 2:00 P.M.	Check production by students	Full Validation Committee	1. Watch videotapes of School News and other student productions 2. Student interviews	1. Videotapes 2. Scripts 3. Others

Time	Activities	Persons in charge of activity	Strategy	Documents consulted
2:30 - 3:3C P.M.	Gather information on student participation in project	Miss Prêstamo Mrs. Mathews Mrs. Aldarondo	1. Give questionnaires to students	
Third Day, December 14, 1972 8:30 - 12:00 P.M.	Observe C.C.T.V. in operation	Full Validation Committee	1. Visits to CCTV room to see live and taped programming 2. Classroom visits to observe procedures	1. Teachers plans 2. Script 3. Others
1;00 - 2:00 P.M.	Meeting of Validation Committee	Mrs. Ramos, Committee Chairman	1. Discuss and report on findings	
2:30 - 3:30 P.M.	Meeting with Superintendent Title III personnel at local level, School principal, Project personnel	Mrs. Ramos, Committee Chairman	1. Oral report on findings 2. Recommendations	

APPENDIX #2

VALIDATION PROCEDURE

Check list

Project title CLOSED CIRCUIT TELEVISION

District Guaynabo Date January 17, 1973

I. Indicate by a check mark how you score each project area using the following scale :

0- no evidence
1- unsatisfactory
2- satisfactory
3- outstanding
4- excellent

AREAS	0	1	2	3	4
1. Strategies used in the project contribute to solving problem(s) identified in the study of needs.		X			
2. The project offers evidence to show the operational objectives were effectively achieved.			X		
3. The project offers evidence to show the instruments used provide objective, reliable information.		X			

AREAS	0	1	2	3	4
4. The project offers a cost-effective analysis that shows relationship between costs and performance of participants.				X	
5. Cost-effective analysis shows adoption is practical. (Money invested is justified in terms of product.)				X	
6. The project is visually and communicably observable				X	
7. The project includes concepts or practices recognized as original, unusual and exemplary.		X			
8. The project offers some innovative procedures, techniques and practices that are worth disseminating		X			
9. The project makes a significant contribution to the educational system			X		

TOTAL : 17 points

II. Explain your scoring.

APPENDIX #3

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF EDUCATION
SAN JUAN REGIONAL OFFICE
EVALUATION PROGRAM
TITLE III PROJECTS

Questionnaire to be answered by students in Project No. 13: Closed Circuit Television in Román Baldorioty de Castro School, Guaynabo District

Name of Student ______________ Sex ______________

Date ______________ Age ______________

Grade ______________ Subject MUSIC

A Put a check mark in the column ( ) corresponding to your answer

	Very Much	Some	so-so	Little	No
1. Do you like the televised music programs in your school?	44	7		1	
2. Do you like the way the class in taught?	32	12	6		
3. Have you taken part in musical activities for the community?	12	5	6	9	20
4. Do you help your teacher prepare materials?	26	13	7	5	1

	Very much	some	so-so	little	No
5. Do you bring things from home for use in class?	21	18	8	3	2
6. Do you discuss with friends, sisters and brothers or parents what you learn in Music Class?	32	11	5	3	1
7. Do you practice at home what you learn in class?	25	15	8	1	1
8. Have you been able to use what you learned in class in other classes?	19	12	9	6	5
9. Have you gone to musical prog. outside of schoo?	7	4	2	4	34
10. Do you like to talk about musical topics?	28	15	4	2	1

B. Answer Yes or No	Yes	No	Nule
1. Did you see televised music programs last year?	50	1	1
2. Do you like the music class now?	50	1	1
3. Do you get more music classes now than before?	47	4	1
4. Does your homeroom teacher help you with the music?	50		2
5. Have you joined a chorus, tuna or other musical activity in the school?	24	25	1

C. Answer :

1. What is the name of the televised music class in your school?

2. What do you do in school when the teacher is absent?

3. What do you do at home when you have no homework?

4. Which, of all your classes, do you like best?

5. What do you think about the music class?

ANSWERS ON QUESTIONNAIRE

	Fifth grade - 27 students	Sixth grade - 25 students
I.	4 Songs for you 2 Music for you 4 Let's sing 10	8 Study with music 1 Music for you 1 Let's sing 10
II.	12 dispersed 6 study music 4 study 3 go home	8 dispersed 2 dismissed
III.	11 study (1 fairy tales) 8 practice songs 4 study and play 1 help mother	10 study 5 sing 4 practice songs 2 help mother 2 read Bible stories 1 TV 1 play 1 read books
IV.	16 mathematics 8 Spanish 7 music 2 social studies 2 English 1 science 1 everything the same	9 English 9 music 4 science 6 mathematics 2 social studies 1 Spanish
V.	12 I like it very much 3 to sing 2 organize well 1 happy 1 almost no outside activities 1 helps when nothing else to do 1 I can help to teach songs 1 Let them put me on television 1 I don't like it, and it can teach a great deal 1 interesting 1 sing and dance 1 beautiful	6 I like it 5 interesting 3 educational 4 we learn a lot 3 we learn new songs 1 should be Tuesday also, not just Thursday 1 sing 1 helps to be in chorus, tríos tunas and to be an artist

APPENDIX #4

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF EDUCATION
SAN JUAN REGIONAL OFFICE
EVALUATION PROGRAM
TITLE III PROJECTS

Questionnaire to be answered by students in Project No. 13 Closed Circuit Television in Román Baldorioty de Castro School, Guaynabo District.

Name of student ______________________ Sex ________

Date ______________________ Age ________

Grade ____________ Subject ____Art____

A. Put a checkmark in the column corresponding to your answer ( )

	Very much	Some	so-so	little	No
1. Do you like the televised art classes in your school?	45	2			
2. Do you like the way the art class in taught?	38	8	1		
3. Have you even been in one exhibit at your school?	15	13	6	7	6
4. Do you help the art teacher prepare materials for the class?	30	9	6	0	2

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	Very much	Some	so-so	little	No
5. Do you bring things from home to use in the class?	29	11	4	2	1
6. Do you talk about what you learn in art class with friends, sisters and brothers or parents?	38	3	4	2	
7. Do you practice at home what you learn in art class?	33	9	4	1	
8. Have you been able to use in other classes what you learned in art class?	25	10	7	3	2
9. Have you gone to art museums or galleries or to exhibits in other schools?	17	4	5	6	15
10. Do you like to talk about art topics?	35	8	4		

B. Answer Yes or No	Yes	No
1. Did you see televised art classes last year?	45	2
2. Do you like the art class more now?	47	0
3. Do you have more art class now than before?	43	4
4. Does your homeroom teacher help in the art class?	47	0
5. Have you ever made a drawing, painting or craft for the art class?	38	9

C. Answer :

1. What is the name of the televised art program you see most often in school?

____

____

2. What do you do in school when the teacher is absent?

____

____

3. What do you do at home when you have no homework?

____

____

4. Which, of all your classes, do you like best?

____

____

5. What do you think about the art class?

____

____

____

APPENDIX #5

PROJECT NO. 13 : CLOSED CIRCUIT TELEVISION

REPORT ON WORK PERFORMED, 1970-71

1. Prepared physical facilities for studio and for wiring classrooms.
2. Relocated television sets of the district and equipped 19 of the 20 classrooms in the school with television sets.
3. Oriented personnel involved in the project.
    a. Summer workshop, 1969-70, of 60 hours for 15 teachers of the Baldorioty de Castro School, site of project for closed circuit television on:
        1. C.C.T.V.
        2. Educational technology
        3. Photography
        4. Visuals

    b. Four-day seminar for production committee
        1. use of equipment
        2. Television techniques
        3. Production of scripts and visuals
        4. Application and practice (offering short classes)

    c. Summer workshop, 1970-71, of 60 hours for 18 teachers from same school on:
        1. Production of scripts and visuals
        2. Presentation of videotaped programs and taping

        3. Techniques and related theory

    d. Orientation and training to a group of students who would act as technicians and substitute announcers.

4. Production of script and visuals, direction and transmission of the following programs using team teaching by the teachers in the school and the music resource teacher.

    a. Series of programs

	Program	Grade	No. of programs
1.	Music for you	I & II	8
2.	Let's sing, friends	V	8
3.	World of Music	VI	8
4.	News series: So Goes the World	I to VI	28

    b. Special programs

        1. Christmas with you
        2. I bring you a heart
        3. Initiation of "Brownies"
        4. Arts festival
        5. December has come
        6. English week
        7. Holy Week in Baldorioty
        8. Education week

5. Study of content in social studies and science textbooks for grades three to six.

6. Evaluation of folklore music records, films and diapositives for use by social studies and science teachers

7. Taping of 12 reels with:
    1. Hispanoamerican folk music
    2. Background music
    3. Marches and national hymns
    4. Narratives for diapositives
8. Prepared 15 sets of diapositives for use in connection with Spanish, social studies and science classes.
9. Prepared test on general knowledge of geography to be administered by television to students in fourth, fifth and sixth grades.
10. Three narratives put on videotape for use in English classes.
11. Videotapes made of six classes in different subjects.
12. Provided for evaluation of programs by teachers and other personnel from standpoint both of technique and education.
13. Worked with Central Office in internal evaluation of project.
14. Supervisory visits to project by personnel from the district, region and Central Office.

APPENDIX #6

May 9, 1972

REPORT ON WORK PERFORMED, 1971-72

C.C.T.V. Coordinator : José L. Hernández

Project Assistant : Mrs. Dolores C. Johnson

A. Televised programs on the air during first semester

1. Social studies

   a) So Goes the World, Tuesdays and Thursdays
   8:20 a.m. and 12:35 p.m.
   Grades I to VI, 1,171 students
   50 programs

   b) Gallery of Famous Men of Puerto Rico, Tuesdays
   8:20 a.m. and 12:35 p.m.
   Grades I to VI, 171 students
   2 programs

   c) Americans on Mt. Everest (film), November 12, 1971
   8:20 and 1:20 p.m.
   Grade V, 263 students
   2 programs

   d) Social studies test
   8:20 a.m. and 1:20 p.m.
   Grades IV to VI, 787 students
   2 programs

2. Art

   a) Having Fun with Art
   9:10 a.m. and 1:20 p.m., Wednesdays
   Grades V and VI, 474 students
   16 programs

3. Music

   a) Sing with me
   8:20 a.m. and 2:40 p.m, Wednesdays
   Grades III and IV, 352 students
   26 programs

b) Music for you
9:40 a.m., Thursdays
Grade II, 167 students
12 programs

c) World of music
8:20 a.m., Fridays
Grade VI, 211 students
12 programs

d) Let's sing, friends
1:20 p.m., Fridays
Grade V, 263 students
12 programs

4. Celebrations

a) Discovery of Puerto Rico
November 18, 1971
8:20 a.m. and 2:40 p.m.
Grades I to VI, 1,171 students
2 programs

b) Halloween Program
Ocotober 29, 1971
8:20 a.m. and 1:20 p.m.
Grades I to VI, 1,171 students
2 programs

c) Christmas
The Savior is Born
December 10, 1971
8:20 a.m. and 1:20 p.m.
Grades I to VI, 1,171 students
2 programs

5. Others

a) Program on cooperatives
October 22, 1971
8:20 a.m.
Grades I to VI, 1,171 students
1 program

b) Tribute to School Lunchroom employees
October 15, 1971
8:20 a.m.
Grades I to VI, 1,171 students
1 program

Total programs for the semester -- 142

(6 regular programs, 1 film and 7 special programs)

B. Other activities performed

1. Prepared visuals for all programs
2. Prepared graphic materials
3. Maintenance on television equipment
4. Trained students as announcers for "So Goes The World"
5. Taped stories and children's songs
6. Two meetings with local planner
7. Held two meetings with the music teacher
8. Duplicated tapes for José de Diego, Ramón Marín, Baldorioty, Santa Rosa and other schools.
9. Taped sound for the Mobile Unit
10. Taped science lecture
11. Evaluated social studies films and diapositives
12. Prepared catalogue of audiovisual resources offered by C.C.T.V.
13. Two meetings with Miss Virginia López
14. Trained the teacher for the English language laboratory in use of audiovisual equipment
15. Meeting with regional coordinator of theater
16. Produced and taped "Gallery of Famous Men of Puerto Rico"
17. Produced "playback" tapes for teachers of the district
18. Two meetings with social studies coordinator
19. Showed views of Puerto Rico to third grade students
20. Prepared materials for social studies test

21. Wrote narrative for Christmas program

22. Went with Mrs. Borges to a lecture at UPR senior high

23. Showed films and filmstrips on federal projects to Department of Education supervisors

24. Wrote scripts for television programs

25. Prepared photographic album of C.C.T.V. programming

26. Prepared annual report

Report on work of second semester 1971-72

A. Televised programs on the air during second semester

1. Social studies

a) So Goes The World

January
8:20 a.m. and 12:35 p.m.
Grades I to VI, 1,171 students
8 programs

b) Homage to Baldorioty de Castro
February
8:20 a.m. and 12:35 p.m.
Grades I to VI, 1,171 students
2 programs

c) Observing the Birthday of Baldorioty
February
8:20 a.m. and 12:35 p.m.
Grades I to VI, 1,171 students
2 programs

d) Film: Yellowstone National Park
February
8:20 a.m. and 12:35 p.m.
Grades I to VI, 1,171 students
2 programs

e) Film: Curiosities in Our World (substituted for "so Goes the World")
February
8:20 a.m. and 12:35 p.m.
Grades I to VI, 1,171 students
2 programs

f) Film: Festival in Japan, world series baseball (sponsored by Coca-Cola)
February
8:20 a.m. and 12:35 p.m.
Grades I to VI, 1,171 students
2 programs

2. Art

a) Having fun with art
Wednesdays
8:10 a.m. and 1:20 p.m.
Grades V and VI, 474 students
12 programs

3. English is Fun (English)
Mondays - 1:10 p.m.
Tuesdays, 9:50 a.m.
Grade II, 167 students
8 programs

4. Music

a) Sing with me
Wednesdays
8:20 a.m. and 2:40 p.m.
Grades III and IV, 352 students
19 programs

b) Music for you
Thursdays
9:40 a.m.
Grade II, 167 students
16 programs

c) World of Music
Fridays
8:20 a.m.
Grade VI, 211 students
16 programs

d) Let's sing, friends
Fridays
1:20 p.m.
Grade V, 263 students
16 programs

e) 2 films: Masterworks of Music (substitute for "So Goes the World")
February
Grades I to VI (using Vol. I-II) 1,171 students
8:20 a.m. and 1:20 p.m.
2 programs

5. Others

a) Tribute to the Secretaries
March 14, 1972
9:00 a.m.
Grades I to VI, 1,171 students
1 program

b) Tribute to the Social Worker
March 28, 1972
9:00 a.m.
Grades I to VI, 1,171 students
1 program

6. Celebrations

a) St. Valentine's Day
February 10, 1972
8:20 a.m. and 1:20 p.m.
Grades I to VI, 1,171 students
2 programs

b) Meditations on Holy Wednesday
March 14, 1972
8:20 a.m. and 1:30 p.m.
Grades I to VI, 1,171 students
2 programs

c) Festival of the Arts
Tuesday, April 4, 1972
9:00 a.m.
Grades I to VI, 1,171 students
1 program

d) Puppets in action
Tuesday, April 4, 1972
1:30 p.m.
Grades I to VI, 1,171 students
Wednesday, April 5, 1972

9:00 a.m. and 3:15 p.m.
3 programs

e) Education Week
May 4, 1972
9:00 a.m. and 1;30 p.m.
Grades I to VI, 1,171 students
2 programs

f) Graduation Program
May 22, 1972 (Graduation Day)
9:00 a.m.
1) First grade
2) Sixth grade
1 program for each

Total programs offered 123

(7 regular programs, 10 films and 11 special programs)

B. Other Activities

1. Edited films for the English language laboratory
2. Evaluated health films
3. Prepared production "Moses, Leader of the People of God"
4. Wrote script for Sixth Grade Graduation program
5. Made tapes
6. Prepared visuals for programs
7. Prepared graphic materials
8. Maintenance of television equipment
9. Five meetings with local planner
10. Weekly meetings with music teacher (16)
11. Four meetings with bilingual English teacher
12. Prepared diapositives for social studies teachers
13. Five meetings with Miss Virginia López
14. Produced and taped "Meditations for Holy Wednesday"

15. Produced and taped St. Valentine's day program

16. Wrote narrative for Holy Wednesday and graduation programs

17. Prepared posters for Title III Project 13 exhibition at the Department of Education

18. Set up exhibit on Title III projects in the Guaynabo District

19. Prepared text and designed bulletin on C.C.T.V. for dissemination

20. Final art work for printing C.C.T.V. bulletin

21. Offered videotapes to inform teachers of the Guaynabo District about Project 13

22. Prepared report on activities in Project 13 for the three years of its existence for external evaluation

23. Wrote scripts for television programs

24. Wrote final report

VALIDATION REPORT

Project #17

Toward Effective Teaching of Basic Reading Skills

VALIDATION REPORT ON PROJECT NO, 17

Toward effective teaching of basic reading skills.Santa
Isabel Demostration District

Projects developed with Title III funds are for the purpose of testing and experimenting with new ideas and practices that add alternative approaches to the educational system. To verify achievements of those projects it is necessary to set up validation procedures.

The following committee was selected to establish the validity of achievements that were identified in Project No. 17:

1. Mrs Rosa M. Báez, AssistantSuperintendent, Coamo
2. Mrs. Jenny Montes de Laó, General supervisor of evaluation, Ponce Region
3. Mrs. Nereida Peña, General supervisor of Spanish, Central Office
4. Mrs. Betty Debién, General supervisor of Spanish, General Office
5. Mrs. Lydia Santiago, School principal, Guayanilla School District
6. Mrs. Gloria Capps, School principal, Coamo School District
7. Mr. José L. Ríos, Spanish coordinator, Coamo District
8. Mrs. Gloria Cuevara, Educational Program Analysi, Central Office

This committeee carried out the work procedures with the results reported in the following report.

I. Description of Project

Project No. 17 has as its fundamental purpose to increase the reading ability of elementary level pupils through creation of reading centers and acquiring certain special human and technological resources for use. Efforts are to be concentrated in first, second and third grades in three school nuclei, one of which is urban. Achievements obtained in the course of the project are to be transferred to another elementary urban and four rural schools for the same grades.

II-Objectives of project

1. To attain a 15% to 20% improvement in command of basic reading skills.
2. Enrich current basic texts in phonetic and structural analysis, comprehension, interpretation and creativity for increasing command of basic reading skills.
3. Attain a high degree of effective use of modern teaching methods and techniques in reading.

III-Procedures used in the validation

A. Strategies

1. Validation committee meetings in which to:
    a. Clarify purposes of validation
    b. examine achievements presented by district personnel in terms of the proposal objectives

    c. determine those aspects in the statement of goals that needclassification or to be more precise
    d. determine different activities needed to confirm the validity of achievements
    e. assign tasks to be carried out by members of the committee
    f. prepare itinerary or work program
    g. decide what documents to be requested from the district before making the first visits

2. Interviews with
    a. administrative personnel of district
    b. skills teachers
    c. non-participating teachers (recipients)
    d. parents
    e. citizens
    f. reading coordinator
    g. educational technology coordinator
    h. local educational planner

3. Questionnaires
    a. skills teachers
    b. teachers who receive project pupils, although they are not directly involved in the project
    c. pupils in the project

        d. students formerly in the project but now back in the regular classwork
        e. parents of pupils in the project

    4. Class observations
        a. classrooms teaching the skills
        b. regular classrooms with former pupils in project

    5. Analysis of teaching materials used in the project

    6. examination of documents

B. Documents

1. There was some trouble in finding all the documents requested for validation of achievements in the project.

District personnel provided a sample of the following:

- a. reassignment table for 1970-71,1971-72
- b. cases recommended by district social worker
- c. participating clientele by zone, grade and sex for 1970-71,1971-72
- d. list of basic skills receiving special attention
- e. narrative report on methods for selecting clientele
- f. case history of pupils
- g. list of pupils returned to classrooms
- h. notebooks of skills (1) tabulated
- i. test for selection and reassignment of pupils
- j. tabulation of tests

k. inventory of project property

l. cumulative record cards for Spanish prepared especially for the project

m. workbook of plans of teachers in the project and of those from whose classes project pupils have been selected

n. professional notebooks of teachers

o. grade books

p. attendance books

The following additional documents were asked for to complete the information the committee considered necessary to arrive at conclusions:

a. list of failures at each center for 1970-71, 1971-72

b. list of students reassigned by grades and school

c. schedules of all project teachers and of those from whose classes project pupils have been chosen

d. regular cumulative records of all pupils

e. lists of reassigned pupils who failed after being returned to the regular classes

f. followup made on students in project identified as having mental limitations by grade and school

g. lists of students receiving consecutive treatment in the project through the implementation of this.

IV. Results of validation

A. Achievements originally offered for validation

1. 91.38% of participating students during the last school year

showed considerable progress with almost 20% returning to the regular classroom by the middle of the year.

2. expanded provision of materials for individual and group help

3. put into practice the teaching of reading skills through use of audiovisual means and equipment, using pupil experiences and the basic vocabulary found in the Basic Reading Series.

4. materials produced for developing activities in the reading centers

B. Achievements offered by project personnel after an analysis of those originally presented at the request of the validation committee in order to clarify some terms used in the latter

1. that 47.73% of participating pupils in 1970-71 and 1971-72 were returned to their classrooms after showing at least an 80% progress according to the test used for this purpose

2. that more material for individual and group help was provided

3. that teaching for reading skills through audiovisual means and equipment was carried out using pupil experiences and basic vocabulary from the basic series

V- Cost-benefit analysis

The committee can say nothing about costs of the project, as no evidence of this kind was given them.

VI-Check list. (See attached copy)

VII-General conclusions

After examining all the documentation offered by the Santa Isabel school district in connection with project No. 17 and after analyzing all evidence presented, the committee found the following:

a. It is obvious the district was faced with a series of problems, in many cases impossible to solve, that made it impossible to carry out the objectives of the proposal effectively. Some of the problems were the frequent change in personnel, both project and supervisory, delay in purchasing procedures, inadequate physical plant and lack of coordination between different levels of supervision.

b. Project development did not correspond completely to the stipulated programming of the proposal. Many activities were not carried out or, in some cases, were so modified as to be foreign to the purposes of the proposal. One basic activity of the proposal was to offer several orientation and professional sessions to personnel directly involved. The committee found no evidence of any activity related to this.

c. The committee believes this project has lacked continuous and systematic evaluative procedures during its development. On asking for quantitative and qualitative evidence to back up opinions expressed by the class period. The total schedule of the classroom is disrupted for those pupils who go to the skills room. A group of pupils does not begin a class with the regular group but comes in 45 minutes later with no idea of what has been going on. Another group leaves the classroom 45 minutes after the class has begun and never knows the end of the class instruction. There was no evidence of joint planning by the skills teacher and the other teacher, thus limiting the chance of expanding the help offered the pupil.

g. On studying the skills teachers plan book, there was no evidence of planning to take care of individual differences in pupils. The same objectives and the same activities were planned for all pupils.

h. After analyzing the answers to the different questionnaires and the interviews by the committee, it was concluded the following terms need to be clarified at once for the project: skills, individualized instruction, team teaching, enrichment.

i. According to the teacher questionnaire and interviews with project teachers, the materials produced are not enrichment of the basic texts but substitutes for the books assigned to the grades. For the most part they are merely a simplification of these. (See Appendices No. 3 and 4) The majority are very well presented, are very attractive and arouse interest in the reader. We must recognize the work of the audiovisual coordinator for this aspect of the work.

We believe greater creativity in preparing audiovisual materials should be encouraged in the teachers and massive reproduction of materials already on the market avoided. The technician should become the training agent of the project teachers and advantage taken of their special abilities to a great degree in adequate planning of training activities in this area .

j. A study of the evidence shows the percentage of reassigned pupils and of progress claimed as achievement is not supported by facts. Only 29.48% of the pupils were reassigned (See Appendix No. 2) The improvement of those reassigned was not always 80% as claimed.

k. Records do not provide enough evidence to show student followup after being reasssigned to their regular groups.

j. No correlation could be seen between the treatment given and the progress observed in the general improvement of the pupils. While there is evidence some pupils improved, there was no progress for the majority. Others seemed to have gone backwards to a failure level.

Appendix No.2

VALIDATION PROCESS

Check list

Project Title : Towards effective teaching of basic reading skills

District :Santa Isabel   Date: January 15, 1973

Indicate with a check-mark how you would classify the achievement in each one of the following areas using the following scale:

1. nothing achieved
2. unsatifactory achievement
3. satisfactory achievement
4. good achievement
5. outstanding achievement

AREAS	0	1	2	3	4
1. The strategies used in the project contribute to solve problem(s) identified in the study of needs.		X			
2. The project presents evidence to show the operational objectives were effectively reached.		X			
3. The project presents evidence to show the instruments used provide objective and reliable information.		X			
4. The project presents an analysis of cost-effectiveness that reflects a relationship between the costs and the performance of participants.	X				
5. Analysis of cost-effectiveness indicates the project is practical (The money spent is justified by the product)	X				

AREAS	0	1	2	3	4
6. The project can be observed both visually and communicably		X			
7. The project has concepts or practices obviously original, unusual and exemplary		X			
8. The project offers innovative procedures, techniques and practices that can be disseminated		X			
9. The project has made a significant contribution to the educational system		X			

II- Explain your classification

QUESTIONNAIRE TO TEACHERS, NON-PARTICIPANTS IN PROJECT NO. 17

Date ______________________

Name ____________________________

Grade taught _________________________

Sahool ________________________________

Answer briefly the questions given below. If you wish to comment at greater length on any of these, please feel free to do so.

1- What important observations would you make about the academic behavior of pupils you have received from the project as compared to the rest of the students?

2- What differences have you noticed between the materials and technological resources you use and those used in the project as to the effectiveness of the two in teaching?

3- In your opinion what basic reading skills do the students in general lack? What is the particular situation of pupils who have been in the project?

Any other comments:

QUESTIONNAIRE TO NON-PARTICIPATING TEACHERS DIRECTLY IN THE CENTERS OF PROJECT NO. 17-INTERPRETATION OF AND CONCLUSIONS FROM QUESTIONNAIRE

The questionnaire had four questions to be answered by teachers receiving pupils who had had the educational experience of Project No. 17 and points up some differences in sizing up the situation.

Item No. 1 on academic progress of project pupils shows

1- Pupils who have had the experience are still below their grade level, although some are beginning to be independent. Some can now be given the first grade book. In one center having a sixth grade, improved reading habits were found in that grade while a third grade showed poor study habits and poor achievement.

Item No. 2 on materials, all indicated the materials were rich, varied, motivational but they also pointed out this is possible because of the resources available to the project teachers.

Item No. 3 which reveals basic skills lacked by pupils in general, shows these to be skills in phonetics, command of reading mechanics, comprehension and interpretation as well as fluency and refinement. It can be seen, as in the other questionnaire, there is confusion about the terms skills.

Criteria for Selection of Clientele

The clientele is selected on the basis of diagnostic test results given by the homeroom teacher, who prepares the tests herself. After she studies the test results, she chooses those pupils with the lowest reading scores. The skills teacher and the project coordinator give these pupils the phonetic analysis test. Those pupils who are unable to recognize the mechanics of reading are then placed in the Reading Project.

Students with 80% improvement after Treatment

School	Grade	Proportion	Reassigned
Felicia	Second	4 to 10	9
	Third	7 to 11	
	Total	11 to 21	
Brumbaugh	Second	4 to 10	18
	Thrid	2 to 20	
	Total	6 to 30	
Paso Seco	Second	2 to 18	
	Third	3 to 15	14
	Fourth	10 to 10	
	Total	15 to 43	
Velázquez	Second	8 to 17	
	Third	2 to 5	15
	Fourth	3 to 8	
	Total	13 to 30	
Ollas	First	19	Did not take pre-or post-test
	Second	20	
	Third	6 to 10	4
	Total	6 to 49	

Gran Total: 51 of 173 (29.48%) had 80% or better achievement

of 173 only 60 (34.6%) were reassigned

QUESTIONNAIRE TO TEACHERS PARTICIPATING IN PROJECT NO. 17

Date ____________________

Name __________________________

Grade (s) taught _________________

School _________________________

1. In the project I have given special attention to the reading skills in the order listed:

____

____

2. I find the following percentage of pupils after completing the project experiences

____ a. have improved a very great deal in Spanish

____ b. have made normal improvement in Spanish

____ c. have improved very little in Spanish

____ d. have remained the same in Spanish

3. In the project I have used the following teaching techniques in the order listed :

a.	d.
b.	e.
c.	f.

4. I find the use of these techniques

____ a. have helped a great deal in my pupils' improvement in Spanish

____ b. have helped little in my pupils' improvement in Spanish

_______ c. have not helped in improving my pupils' Spanish

_______ d. have held back my pupil's improvement in Spanish

5. I have used the following technological resources in the order listed:

____

____

6. I find using technological resources has helped me more in

____________________ initial motivation of the classes

____________________ the novelty it is for the pupils

____________________ the systematic development of the skills

____________________ evaluation of the classes

Comment briefly on these points.

7. The use you have made of these human resources

A - Reading coordinator

B - Educational technology coordinator

C- Skills teacher

8. What use have you made of materials produced for enrichment of the basic texts?

INTERPRETATION OF AND CONCLUSIONS FROM THE QUESTIONAIRE TO PROJECT NO. 17 PARTICIPATING TEACHERS

Item No.1,asks about the reading skills to which they gave special attention, we found

1. There is confusion between the areas in which basic skills are grouped and the skills as such (as the same thing).

   In the three centers oral expression was named as a basic skill. None of the answers showed an understanding of the term skill, nor a real understanding of the breakdown of skills as published in the project, which is divided into five areas.

Item No. 2, on improvement by pupils who were in the project, results reported from two centers, Ollas and Felicia, show greater improvement fluctuating between 60 to 73%, less improvement about 40%, with 30% showing no improvement. According to those two centers the educational experience was positive.

Item No. 3, one teacher indicated the use of recognition clues and phonetic levels were the preferred reading techniques, besides the use of reading units.

Answers seem to show they know the techniques appropriate for the global method in reading but this knowledge does not assure their use in procedures according to the techniques used by the teacher. All agree the techniques used have been a great help in the improvement of their pupils.

Items No. 5 and 6, on use of technological resources, show filmstrips, slides, films, tape recorders and projectors were used most. These helped particularly in the systematic development of the skills, as stated by the teachers.

Items No. 7 and 8, on human resources and materials produced, indicate these have been very helpful as supportive help to teachers.

One answer to Item No. 8 on use of materials for enrichment of the basic texts, reveals the teacher is not using these texts. It must be pointed out that, if this is true, the materials are not enrichment but a substitute for the books assigned to a grade.

To sum up, we must say the questionnaire answers do not give clear observations that permit a completely objective validation of achievements claimed for the project, especially those having to do with improvement in techniques and use of materials for enrichment of the basic texts.

INSERVICE EDUCATION FOR TEACHERS OF NATURAL SCIENCES

PROJECT # 18

275

Title : Inservice education for teachers of natural sciences
Project No. 18, Humacao Demonstration District

I. Description of Project

Proposal No. 18 for inservice education to teachers of natural sciences in the school districts of Humacao, Naguabo, Las Piedras, Yabucoa and Fajardo is supported by statistical data showing the following conditions as prevailing in those districts in relation to the teaching of natural sciences:

1. Science orientation and supervision is those districts is limited because of the very few trained personnel
2. Science equipment and materials are very limited
3. A total of 64% of those teaching science in the districts have only a normal certificate; 30% have less than normal; only 6% have more than normal certificate and other preparation.

The proposal consists of a training phase of 10 alternate Saturdays for five groups of teachers from elementary and junior high level according to following schedule:

Elementary level

Groups 1-3

Beginning	31
Continuing	16
Total	47

Groups 4-6

Beginning	17
Continuing	10
Total	27

Junior High Level	
Groups 7-9	10

The training centers were located in the Luis Muñoz Rivera and Ana Roqué schools of the Humacao district. Five groups of teachers met for three hours, 8:30 - 11:30 a.m. for 10 Saturdays and were organized in the following manner:

Elementary Level	
Grades 1-3	
Group #1	21 teachers
Group #2	21 teachers
Grades 4-6	
Group #1	14 teachers
Group #2	15 teachers
Junior High Level	
Grades 7-9	10 teachers

Personnel and resources used in developing the training

1. Mr. Federico Mathew, assistant to the director of the Regional College of the University of Puerto Rico in Humacao, who is also a specialist in science, was a consultant for the training.
2. Mrs. María T. Quiles Rullán, Training Director and now Director of the Curriculum Center in Humacao.
3. Mrs. Rosa Quiñones de Lombay, resource teacher at elementary level, who has produced curriculum materials in science at the Curriculum Center in Humacao and has also helped with orientation of teachers in science in the Humacao Educational Region.

4. Mr. Eugenio Brito, resource teacher at elementary level, science coordinator for the Maunabo district and has a major in mathematics and physics at secondary level.

5. Mr. Jesús María Cardona, resource elementary teacher with a major in sciences and outstanding science teacher in junior high.

6. Miss Olga Violeta Vázquez, resource training teacher in science, junior high level. She has prepared very good curriculum materials in chemistry and biology for senior high at the Humacao Curriculum Center, has taken part in biological research. Currently, she is biology teacher in the Humacao Senior High and was just recognized as the Humacao Educational Region teacher of the year.

7. Besides the persons under contract, administrative and supervisory personnel in charge of implementing this proposal in the Humacao Demonstration District and the district science coordinator took an active part in planning, implementing and evaluating activities developed in the training.

8. The regional planner and a group of regional supervisor helped to select the teachers in the project.

Identification of the situation through the following criteria:

1. Comparative analysis of results from the following diagnostic tests:
   - A. Elementary level: Science on the basis of processes, Forms A. and B.
   - B. Junior high level

     Content of three following courses:

Introduction to biology

Introduction to chemistry

Introduction to physics

Forms A and B.

2. Analysis of a sample of supervisory visits to participating teachers in terms of following aspects:
    a. Correlation of conceptual outlines with processes
    b. Psychomotor skills
    c. Attitudes
    d. Use of curriculum materials and laboratory equipment
    e. Teacher and student records
3. Analysis of questionnaires from teachers on usefulness of training
4. Analysis of interviews with participating teachers
5. Production of participating teachers in terms of:
    a. science concepts and skills
    b. correlation between processes and the Herman and Nina Schneider science series for elementary schools.
    c. Helpful devices for teachers.
6. Inventory of equipment and materials
7. Analysis of teacher preparation for those in science training
8. Followup visits by science supervisors to classrooms
9. Impressions of students from districts from which the teachers come
10. Observations of impact on the community of setting up science laboratories.
11. Impressions of teachers and students who began research work,

II. Objectives of the project

See Appendix i: Redefinition of objectives and restructuring of goals, Project No. 18, pages 1,2,3,9.

III. Procedures used in validation

A. Strategies used:

Strategy used in the Validation Process

Date	Activity	Objective	Place	Personnel	Strategy	Documents examined	Observations
October 19, 1972	Initial orientation of validators	Explain validation process	Central Office	Island validators	Lectures and open discussions	Procedural manual	
October 31, 1972	Meeting, validators, Proposal No. 18	Re-analysis and clarification of process	Humacao Educational Region	8 validators	Discussion	Report on goals	We need a more precise and clearer document
November 27, 1972	Meeting to prepare Plan of Action	Examine report on goals by specific degrees. Prepare validation design	Humacao Educational Region	8 validators	Analysis cooperative production of design	Appendix I Appendix II	Division of group into sub-committees for validation
December 5, 1972 A.M.	Meeting proposal personnel of Region	Explain process and reason for validation	Superintendent's Office		Group interview: Report	Procedural manual Teachers schedule	Visits to the schools
December 5, 1972 P.M.	Validation Meeting	Design instruments for gathering data. Prepare itinerary	Humacao Regional Office	8 validators	Cooperative work		
December 12,1972	Meeting of validators	Re-examine other documents	Regional office	8 validators	Group analysis	Reports on materials produced Resume Mobile Unit	
December 13,1972	Validation visits to classrooms	Verify achievements listed in Appendix I	Naguabo, Yabucoa, Humacao, Fajardo	6 validators 8 teachers	Class observations; teacher, student and principal interviews	Plans, tests, techniques, use of materials	

Date	Activity	Objective	Place	Personnel	Strategy	Documents examined	Observations
December 14,1972	Validation visits to classrooms	Same as above	Las Piedras	2 validators 2 teachers	Observations interviews	Same as Above	
December 18,1972	Visits to libraries, Mobile Laboratory, classroom laboratories	Verify achievements	Region	1 principal 8 validators	Interviews observations	Work of pupils, teacher plan of work	
December 18,1972 P.M.	Meeting	Discuss findings	Region	Same as above	Conversation		Planning discussion, findings with all personnel
December 20,1972	Meeting	Report findings to region	Buena Vista School	All project participants	Oral report of findings, open discussions		Reading of recommendations and findings
January 9,1973	Validation meeting	Prepare final report	Region	4 validators	Writing of report	5 tapes, individual reports of validators	
January 12, 1973	Meeting	Write report	Santa Rosa School, Ceiba	2 validators	Writing report	Appendix I Appendix II Validators' reports, minutes of previous meetings	

IV. Results of validation

1. We checked the fact the training of science teachers was carried out effectively. For this we used as instrument "Guide for visits" (See Appendix No. 3), which showed the teachers were putting into practice the exercises in process and the knowledge acquired in the training.
2. We verified the production of curriculum materials by the teachers for enrichment of elementary and junior high levels. (See Appendix No. 2)
3. We observed performance in two classroom laboratories, where pupils expressed their wish to continue learning through use of scientific equipment found in those laboratories. Teachers and principals in interviews said the same thing, confirming information from those schools. (See Appendix No. 1, pages 27-28)
4. We saw two single subject libraries in operation and the records of the librarians verified the facts given in Tables 1 and 2, pages 21,22,23,24 of Appendix No. 1 are correct.

Progress of the clientele

We cannot state the percentage of achievement of the clientele because it is too early in the process: however, teachers report they note more interest and a change in attitude of students as a result of this project.

V. Cost-Benefit Analysis

III COST EFFECTIVENESS ANALYSIS/ECONOMICAL

A PRACTICE IS CONSIDERED TO BE COST-EFFECTIVE WHEN IT CAN BE ESTABLISHED THAT THE PROGRAM'S BENEFITS AND/OR SOCIAL VALUE ARE PROPORTIONAL TO THE COST OF OPERATION OVER A PERIOD OF TIME

I. BASIC INFORMATION	EQUIPMENT		MATERIALS		FACILITIES		STAFF DEVELOPMENT		REMODELING		PERSONNEL			
											Professional		Non Professional	
	AMOUNT	Percent OF COL.	AMOUNT	Percent OF COL.	AMOUNT	Percent OF COL.	AMOUNT	Percent OF COL.	AMOUNT	Percent OF COL.	AMOUNT	#FTE	AMOUNT	#FTE
a. PLANNING REGULARLY PROVIDE BY AND COST BORNE BY LEA..	10.00	100%	12.63	100%	150.00	100%	NONE		NONE		2,262.50			
ADDITION TO REGULAR PROVISION AND COST BORNE BY LEA.	NONE		NONE		NONE		500.00	100%	NONE		5,263.75		113.75	
ADDITION TO REGULAR PROVISION AND COST BORNE BY OTHER RESOURCES	NONE		NONE		NONE		NONE		NONE		NONE		NONE	
TOTAL OF COLUMN	$10.00		$12.63		150.00		500.00		00.00		7,526.25		113.75	

LEA PER PARTICIPANT EXPENDITURE (Excluding additional costs) Planning phase No participants ( )

NUMBER OF PARTICIPANTS SERVED BY PROJECT Planning phase No participants ( )

AVERAGE NUMBER OF HOURS PER PARTICIPANT SERVED Planning phase No participants ( )

	EQUIPMENT		MATERIALS		FACILITIES		STAFF DEVELOPMENT		REMODELING		PERSONNEL			
											Professional		Non Professional	
	AMOUNT	Percent OF COL.	AMOUNT	Percent OF COL.	AMOUNT	Percent OF COL.	AMOUNT	Percent OF COL.	AMOUNT	Percent OF COL.	AMOUNT	#FTE	AMOUNT	#FTE
B. FIRST YEAR (1970-71) REGULARLY PROVIDE BY AND COST BORNE BY LEA.	$12,500.00	100%	NONE		$620.00	100%			NONE		$37,713.15		NONE	
ADDITION TO REGULAR PROVISION AND COST BORNE BY TITLE III	NONE		$6,126.00	100%	NONE				NONE		8,151.61		$845.25	
ADDITION TO REGULAR PROVISION AND COST BORNE BY OTHER RESOURCES	NONE		NONE		NONE				NONE		NONE		NONE	
TOTAL OF COLUMN	$12,500.00		$6,126.45		$620.00				NONE		$45,864.76		$845.25	

LEA PER PARTICIPANT EXPENDITURE (Excluding additional costs)-- $ 17.43

NUMBER OF PARTICIPANTS SERVED BY PROJECT-- 2,916.00

AVERAGE NUMBER OF HOURS PER PARTICIPANT SERVED-- 192.00

	EQUIPMENT		MATERIALS		FACILITIES		STAFF DEVELOPMENT		REMODELING		PERSONNEL			
											Professional		Non Professional	
	AMOUNT	Percent OF COL.	AMOUNT	Percent OF COL.	AMOUNT	Percent OF COL.	AMOUNT	Percent OF COL.	AMOUNT	Percent OF COL.	AMOUNT	#FTE	AMOUNT	#FTE
C. SECOND YEAR (1971-72) REGULARLY PROVIDED BY AND COST BORNE BY LEA.	NONE		NONE		$620.00	100%			NONE		$44,546.11		NONE	
ADDITION TO REGULAR PROVISION AND COST BORNE BY TITLE III	$62,257.69	100%	$3,312.00	100%	NONE				NONE		$27,081.04		$5,589.00	
ADDITION TO REGULAR PROVISION AND COST BORNE BY OTHER RESOURCES	NONE		NONE		NONE				NONE		NONE		NONE	
TOTAL OF COLUMN	$62,257.69		$3,312.00		$620.00				NONE		$71,627.15		$5,589.00	

LEA PER PARTICIPANT EXPENDITURE (EXCLUDING ADDITIONAL COSTS)-- (5. 72)

NUMBER OF PARTICIPANTS SERVED BY PROJECT -- (7,891)

AVERAGE NUMBER OF HOURS PER PARTICIPANT SERVED-- (197)

PERSONNEL COSTS, PROJECT 18

	1970 - 1971					1971 - 1972				Gran Total	
	Mileage	Salary	Fringe Benefits	Total		Mileage	Salary	Fringe Benefits	Total	1970 -	1972
Participating teachers	$829.96	$33,459.00	$4,015.08	$38,304.04		$1,029.90	$36,623.31	$4,394.80	$42,041.01		$ 80,345.05
Resource teachers		1,999.50	83.97	2,083.47		57.20	3,614.55	170.49	3,842.24		5,925.71
Training director		578.00	24.27	602.27		89.76	910.00	43.68	1,043.44		1,645.71
Federico Mathew (consultant)		490.00	20.58	510.58			490.00	23.52	513.52		1,024.10
Mobile unit teacher							6,350.00	762.00	7,112.00		7,112.00
Isabel Velázquez (Librarian)							6,720.00	806.40	7,526.40		7,526.40
María Z. Colón							6,420.00	770.40	7,190.40		7,190.40
Secretary Title III		735.00	110.25	845.25			1,620.00	243.00	1,863.00		2,708.25
Juan A. Tolentino (chauffeur)							3,240.00	486.00	3,726.00		3,726.00
TOTALS	$829.96	$37,261.50	$4,254.15	$42,345.61		$1,169.86	$65,987.86	$7,700.29	$74,858.01		$117,203.62

EQUIPMENT AND MATERIALS

	1970 - 71	1971 - 72		TOTAL							
Books in the Libraries	$ 2,126.45	$ 1,312.18		$ 3,438.63							
Materials in the Laboratories	4,000.00	2,000.00		6,000.00							
Equipment in the Laboratories	12,500.00	37,537.00		50,037.00							
Equipment, Mobile Unit		1,547.07		1,547.07							
Library equipment		3,878.62		3,878.62							
Expenses, mobile unit		795.00		795.00							
TOTAL	18,626.45	47,069.87		65,696.32							

Personnel Costs				$117,203.62							
Equipment and Materials				$ 65,696.32							
Grand Total				$182,899.94							

Appendix No. 2

VALIDATION PROCESS

Check List

Project Title: Closed Circuit Television

District. : Humacao Date: January 12, 1973

Indicate with a check-mark how you would classify the achievement in each one of the following areas using the following scale.

1. nothing achieved
2. unsatisfactory achievement
3. satisfactory achievement
4. good achievement
5. outstanding achievement

AREAS	0	1	2	3	4
1. The strategies used in the project contribute to solve problem(s) identified in the study of needs.					x
2. The project presents evidence to show the operational objectives were effectively reached.					x
3. The project presents evidence to show the instruments used provide objective and realiable information.					x
4. The project presents an analysis of cost-effectiveness that reflects a relationship between the costs and the performance of participants.					
5. Analysis of cost-effectiveness indicates the project is practical (The money spent is justified by the product)					
6. The project can be observed both visually and communicably				x	

AREAS	0	1	2	3	4
7. The project has concept or practices obviously original, unusual and exemplary				x	
8. The project offers innovative procedures, techniques and practices that can be disseminated					x
9. The project has made a significant contribution to the educational system					x

II. Explain your rating: The direct observation, group and individual interviews, and especially, the positive attitude towards science teaching expressed by project staff, shows that achievements stimulate them to go forward.

VII. Recommendations and general conclusions

A. Inservice training

1. We recommend adopting an inservice program as it has been instrumented but, if this is very expensive, other strategies less expensive be developed, such as:
    a. through an inventory of capable personnel in the region, including teachers, principals, superintendents, assistant superintendents, coordinators, etc., work teams be organized to implement the training during regular school hours.
    b. the supervisory circles should receive training from a pilot group during regular school hours and then the school principal as part of her duties, and with the help of additional resources, should in turn give the training to the group of teachers.

It is our conclusion that continuing to develop training programs is practical and will cost less if, in adopting or adapting a plan, use is made of good resources already in the school nuclei, which have never been used to full capacity but have, actually, been under-estimated. We base this statement on the principle that often one teacher learns much more than another.

B. Mobile laboratory

1. We recommend a great increase in mobile units in isolated rural areas that will concentrate their efforts on areas given priority so as to provide more nearly equal educational

opportunities for developing scientific processes both quantitatively and qualitatively to the highest degree and thuspermit potential consumers from these rural areas to compete effectively with those from more privileged urban areas.

C. Classroom laboratories

1. We recommend a great increase in classroom laboratories in rural areas but with an intensive training plan to prepare personnel systematically for effective use of the equipment and materials, which are frequently unused because of ignorance on the part of the personnel.

D. One-subject libraries

1. We recommend continuing the libraries that, based on analysis of student and teacher needs, are limited to the various areas of one field of knowledge, which may be science, but that, making systematic use of the time, also contribute to the integral development of the pupil.

Finally, we are of the opinion that, in the instrumentation of adapting or adopting this project, the following be given special consideration:

a. awareness of those concerned in the process

b. cooperative coordination of efforts

c. search for relevant data that make clear the actual situation requiring priority from among all those in the system.

d. statistical or quantitative information be given for all possible data without losing sight of the human element involved

e. the pupil should show that the effort and money invested have resulted in his integral development toward his becoming a whole person

f. the validation process be done during operation of the project, so that we can explain more clearly to the system how to do more with less.

The success of Project No. 18 in Humacao is due, in great part, to the consideration of these principles.

Appendix 3

Commonwealth of Puerto Rico
Department of Education
Demonstration District
Humacao, Puerto Rico

VISIT GUIDE

Name of teacher ______________________________

School ________________ Zone ________ School district ______________

School principal ______________________________

Level ____________ Grade ____________ Enrollment in group ____________

Attendance ____________

I. Observations made:

A. What degree of correlation is there between the process and the concepts contained in the courses at this level?

1. In which of the following processes(intellectual skills) were the students involved as the class developed?

	Approximate time used	Additional Observations
Observation		
Inference		
Clasification		
Prediction		
Relation of time and space		
Numerical relacions		
Communication		
Measurement		
Formulation of hypothesis		

Hypotheses presented as part of class development

Biological sciences	Physical sciences	Terrestrial and spatial sciences

Theories or scientific laws presented as part of class development

Biological sciences	Physical sciences	Terrestrial and spatial sciences

	Approximate time used	Additional Observations
Operational Definitions		
Control of variables		
Interpretation of data		
Experimentation		

2. What aspects of cognitive control were developed with the processes or intellectual skills?

ELEMENTARY LEVEL

Concepts or ideas developed

Biological sciences	Physical sciences	Terrestrial and spatial sciences

JUNIOR HIGH LEVEL

Concepts or ideas developed

Introduction to Biology	Introduction to Chemistry	Introduction to Physics

Hypotheses presented as part of class development

Introduction to Biology	Introduction to Chemistry	Introduction to Physics

Theories or scientific laws presented as part of class development

Introduction to Biology	Introduction to Chemistry	Introduction to Physics

B. What psychomotor skills did students use in class activities?

Manual or instrument skills: ______________________________

C. What activities carried out contribute to developing or changing student attitudes?

Activity	Attitudes

D. What audiovisual resources did the teacher use to develop the class?

E. What science teaching techniques did the teacher use in the class?

Teaching techniques	Description of Activity
Individual laboratory activity	
Group laboratory activity	
Laboratory demonstration by teacher	
Laboratory demonstration by a student	
Group laboratory demonstration	
Analysis of illustrations	
General group discussions	
Individual oral reports	
Group discussions	
Panel discussions	
Supervised study	
Debate	
Lecture by teacher or other resource	
Excursion	
Group reports by students	
Achievement tests	
Others	

Additional observations: ______________________

F. Teacher and student records

Record	Place a X mark, if you have it	Observations
Plan notebook		
Professional notebook		
Notes notebook		
Inventory of equipment, materials and books		
Notations on students		

G. Condition of classroom

1. Is science equipment?

Enough ☐ Little ☐ None ☐

2. Does it have laboratory facilities?

Water ______________ Sink ______________ Gas ______________

Light ______________ Receptacles ______________

3. Does it have science materials?

Enough ☐ Little ☐ None ☐

4. Does the teacher know the science equipment and materials and use them? Does the teacher have the necessary equipment?

____

____

H. What interpretation can be made of this teaching-learning situation observed?

____

____

Commonwealth of Puerto Rico
Department of Education
Superintendent Office of School
Humacao, Puerto Rico

REDEFINING OF OBJECTIVES AND RESTRUCTURING OF GOALS
Project No. 18

TRAINING PHASE

OBJECTIVES	GOALS
I. After carrying out science training consisting of 10 3-hour sessions on alternative Saturdays, it is expected that of 138 science teachers, elementary and junior high level, from school districts of Humacao, Yabucoa, Fajardo, Naguabo and Las Piedras A. 75% of the 57 beginning group and 16 of the continuing group from first to third grade will have performed individually and or in groups the activities from the processes guides for first to third grade with their students in the classroom, during which they will have carried out the following processes: 1. observation 2. classification 3. spatial-time relations 4. numerical relations 5. inferences 6. predictions 7. communication 8. measurements	Science training of 10 3-hour sessions on alternate Saturdays was given to 130 teachers who attended these, as there were eight dropouts for different reasons, and were distributed as follows: Level 1 - 3 Beginning group - 56 teachers Continuing group - 16 " Total 72 teachers Level 4 - 6 Beginning group - 33 teachers Continuing group - 10 " Total 43 teachers Junior high level Beginning group - 14 teachers Continuing group - 1 " Total 15 teachers

OBJECTIVES

B. 75% of the 36 beginning teachers and 10 of the continuing group from the 4 - 6 level will have performed individually and/or in groups the activities of the science laboratory contained in the D.C. Heath Series by Herman and Nina Schneider from 4th to 6th grades and the correlations so far as possible, according to the processes guides for 4th, 5th and 6th grades, which have the following processes:

1. analysis of data
2. control of variables
3. design of models
4. operational definitions
5. formulation of hypotheses
6. experimentation
(These integrated processes include the eight basic processes)

C. 70% of the 18 beginning teachers and one of the continuing teachers from junior high level will perform individually and/or in groups the laboratory activities, incentives to ask questions and analysis of pictures and the remaining content of the junior high level courses, using laboratory material and equipment:

1. Introduction to Biology, 7th grade
2. Introduction to Chemistry, 8th grade
3. Introduction to Physics, 9th grade

D. 60% of the 138 teachers at both levels will use properly the following teaching techniques:

1. Laboratory techniques:

GOALS

Teachers came from the following towns as below:

Humacao	45
Yabucoa	33
Las Piedras	18
Naguabo	14
Fajardo	19
Luquillo	1
Total	130

Results of training activities carried out were:

A_1 A comparative analysis of results from the diagnostic test on processes, forms A and B, given to a sample of 31 teachers, 1st to 3rd grades, who were in the 1970-71 training, showed an average of achievement ranging from 37.78% on Form A to 71-47% Form B, which shows a positive increase in achievement. (See appendix No. 2, of Report on Activities, Proposal No. 18, 1970-71)

A_2 In a sample of 13 teachers, 1st to 3rd grades, who were in the 1970-71 training, from the Humacao, Naguabo, Yabucoa, Las Piedras and Fajardo school districts, the Humacao Educational Region science supervisors made the following observations:

1. The following exercises in processes were observed in classes:

   a. Communication #3, Description of a globe to be blown up
   b. Observation #4, Germination of a seed

OBJECTIVES	GOALS
a. preparation of micro-organism cultures b. use and handling of the following instruments: scales monocular microscope stereoscopic microscope thermometers dynamometer prisms magnifying glasses, etc. 2. Teaching techniques in classroom work a. individual laboratory b. group laboratory c. trips d. class demonstrations e. analysis of films f. analysis of written reports g. lectures h. supervised study i. research (experiments) j. analysis of situations (in the form of inquiry)	c. Space and time relations #3, Arrangements in Space d. Predictions #3, Descriptions of a bouncing ball e. Use of numbers #7, Multiplication f. Adding whole numbers in the number line g. Symmetry in animals h. Comparing weights on a scale i. Observing time j. Arranging plane figures by areas k. Introduction to charts l. Observation #13, Observation of mold colonies (See visit reports to teachers who were in the science training of Proposal No. 18, Inservice Education for natural science teachers, Humacao Demonstration District, page 3, Section II, May 25, 1971 Humacao Regional Office) A_3 An analysis of results from the test on processes, Forms A and B, given to a sample of 19 teachers from the beginning group, 1st to 3rd grades, in the 1971-72 training showed the average of errors in processes dropped from 35.89 to 23.68. (See Appendix No. 1, Report on Activities Carried Out, Project No. 18, 1971-72). A_4 Analysis of results from the test on processes, Forms A and B, given to a sample of 11 teachers from level 1 - 3 in the continuing group showed the average of errors dropped from 10.27 to 7.09. (See Appendix No. 2, Report on Activities Carried Out, Project No. 18, 1971-72). B_1 Analysis of results from the test on processes, Forms A and B, given to a sample of 21 teachers, level 4-6, in the 1970-71 training, showed an average of achievement in processes carried out rose from 29.9% to 42.4%. (See Appendices No. 3A and 3B, Report of activities, Proposal No. 18, 1970-71)

OBJECTIVES	GOALS
	B$_3$ Observations by Humacao Educational Region science supervisors of a sample of 28 teachers, level 4 - 6, in 1971-72, were the following: 1. Process exercises carried out in the classes observed: a. Observation 2, Observing temperature b. Observation 16, Observing movement of animals c. Observation 1, Color perception d. Observation 4, Color observation, shape, size and texture to identify wholes and the elements of those wholes e. Prediction 2, Using charts to make a prediction f. Observation 6, Odor perception g. Use of numbers 8, To determine ratios and averages, we divide h. Use of space/time relations 14, Speed i. Measurements 4, Arrangement of plane figures by area j. Observation 16, We observe animal movements k. Observation 12, Color observation and changes of color in plants l. Classification, Classification of leaves and nuts m. Observation 5, Sound perception n. Inference 2, Differences between similar objects o. Use of numbers 8, To determine ratios and averages, we divide p. Observation 11, Observing time q. Space/time relations 9, Direction and distance 2. Chapters and topics from the books in the Schneider series on which the classes were based:

OBJECTIVES	GOALS
	a. Science in your life, Chapter 2, Insects b. Science in your life, Chapter 4, Solids, liquids, and gases c. Science in your life, Chapter 6, Lakes, Swamps and Springs d. Science present and future, Chapter 3, Forces that Change the Earth e. Science Present and Future, Chapter 10, the Nervous System (See Visit Report to teachers in the training of Proposal No. 18, Intraining Service for natural science teachers, Humacao Demonstrative District, 1971-72, June 5, 1972) C$_1$ Comparative analysis of diagnostic test, Forms A and B, given in 1970 - 71, to a sample of 10 teachers, junior high level, showed a variation in achievement average of 59.7% to 67.3% showing a positive increase (See Appendix No. 4, Report Activities, Proposal No. 18, 1970-71) C$_2$ Analysis of the test given a sample of 6 teachers, in 1971-72 junior high level, Forms A and B, showed three teachers had improved their achievement average by 3.7% (See Appendix No. 5, Report on Activities, Proposal No. 18, 1970 - 71). D$_1$ From the sample of 22 teachers from the different levels, the supervisors gathered the following observation or comments during the school year: 1. "The lectures of Dr. Mathew helped me to remember materials I had studied and to see the need to study more about certain areas of science and mathematics".

OBJECTIVES	GOALS
	2. "I believe there were three Saturdays when activities of real value were carried out: a. how to use a microscope b. how to prepare cultures." 3. "The visit to the Regional College laboratory was a big help." (See visit report, 1970-71) D_2 From a sample of 32 teachers from the diferent levels, the science supervisor gathered the following observation in 1971-72: 1. In one class observed (kindergarten) the class was developed by working with small groups of pupils. 2. They have learned to use some instruments such as thermometers and microscope. 3. It has helped them to improve their techniques of teaching such as experimentation and situation analysis. 4. Dr. Mathew's lectures have helped them broaden concepts through his talks and/or demonstrations. (See visit report, 1971-72).
II. As a result of carrying out a cycle of 10 training sessions, for elementary and junior high science teachers in cooperation with the mobile unit, it is expected A. To produce curriculum materials to enrich the elementary and junior high science classes by:	The results of the training for science teachers, elementary and junior high, with the cooperation of operation of the mobile unit were: A. Production of curriculum materials to enrich the elementary and junior high science classes: 1. Evaluation exercises

OBJECTIVES	GOALS
1. evaluation exercises 2. lessons on substituting materials 3. orienting the teacher on a. identifying laboratory materials b. measuring angles	a. Description of a blow-up globe 1. differences and similarities 2. air has weight 3. characteristics of a globe full of different materials b. Temperature observations c. States of matter 1. classification of matter 2. some solids change their state on absorbing heat d. Observations through sense responses e. Reading a watch or clock f. Use of number lines g. Identification of colors 1. coloring balls 2. coloring globes 3. coloring hats 2. Lessons on materials substitution a. colors b. texture 1. texture of balls 2. texture of different objects c. recognition and use of angles d. symmetry

OBJECTIVES	GOALS
	e. Classifications of magnets 1. different classes of magnets 2. playing with magnets f. Wholes g. Measurements h. Classification of seeds and shells i. Direction and distances j. Geometric figures k. Volume

COMPARATIVE ANALYSIS OF RESULTS FROM FORMS A AND B GIVEN A GROUP OF 1st. - 3rd. GRADE TEACHER IN TERMS OF ERRORS
1971 - 1972

Processes involved in the test	No. of errors made by each teacher in each process contained in the test															
	1		2		3		4		5		6		7		8	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Data analysis	0	1	0	1	0	2	3	0	0	2		0		0		0
Use of numbers	1	1	0	0	1	0	2	0	0	0		0		0		0
Observation	3	0	0	0	0	0	7	0	0	0		0		0		4
Inferences	0	3	0	0	0	3	0	0	0	0		0		0		0
Classification	3	0	3	3	3	3	3	3	0	3		0		3		3
Charts	0	0	3	2	5	2	6	4	8	3		3		0		0
Space/time relations	6	2	6	0	6	0	6	0	4	0		0		2		0
Formulation of hypotheses	8	0	5	0	5	1	7	1	9	2		0		2		0
Control of variables	0	1	8	0	0	2	2	2	4	8		7		8		6
Operational definitions	2	0	2	1	0	0	4	0	4	2		0		2		2
TOTALS	23	8	27	7	20	13	40	10	29	20		10		17		15

Process involved in the test	No. of errors made by each teacher in each process contained in the test															
	9		10		11		12		13		14		15		16	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Data Analysis		2		0		0	2	0	0	0	0	0		0	2	0
Use of numbers		0		0		0	3	3	2	0	1	0		2	0	0
Observation		0		8		0	0	0	3	0	0	2		0	0	0
Inferences		0		0		4	0	0	6	0	0	0		6	0	0
Classification		3		3		3	3	3	2	3	3	3		3	3	3
Charts		3		6		2	3	5	6	2	6	2		0	6	2
Space/time relations		2		0		2	6	2	6	2	6	2		0	6	2
Formulation of hypotheses		0		2		2	9	2	7	0	9	0		2	7	2
Control of variables		7		8		2	0	7	4	8	2	8		8	4	6
Operational definitions		0		0		2	2	2	4	1	2	2			4	1
TOTALS		17		27		17	28	24	40	15	31	22		23	29	20

Process involved in the test	No. of errors made by each teacher in each process contained in the test															
	17		18		19		20		21		22		23		24	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Data Analysis		0	3	3	3	0	2	1	3	2	3	0		2		0
Use of numbers		4	3	0	5	1	4	3	4	1	0	3		0		2
Observation		0	0	0	6	0	7	3	0	0	0	0		0		4
Inferences		0	6	0	0	3	0	0	0	0	0	0		3		0
Classification		3	0	3	3	3	3	3	3	3	3	3		3		3
Charts		0	6	5	8	5	5	9	3	3	5	5		3		6
Space/time relations		4	6	2	6	2	6	0	6	2	0	2		2		5
Formulation of hypotheses		0	5	2	9	0	7	2	7	2	9	2		7		7
Control of variables		6	2	8	4	4	4	5	0	6	4	8		8		2
Operational definitions		2	0	2	4	2	4	2	2	2	4	2		2		0
TOTALS		19	31	25	48	20	42	28	28	21	28	25		30		29

Process involved in the test	No. of errors made by each teacher in each process contained in the test															
	25		26		27		28		29		30		31			
	A	B	A	B	A	B	A	B	A	B	A	B	A	B		
Data Analysis	0	0	0	0		0	2	3	0	3	0	3	2			
Use of numbers	0	0	0	0		0	2	3	5	2	6	1	2			
Observation	4	1	0	2		1	3	2	3	3	6	9	0			
Inferences	6	0	0	3		0	6	0	6	6	6	3	0			
Classification	3	3	3	3		3	3	3	3	0	3	3	3			
Charts	3	5	5	5		11	8	9	8	8	8	8	8			
Space/time relations	6	2	6	2		2	6	6	6	1	6	2	6			
Formulation of hypotheses	7	7	9	7		7	9	5	9	7	9	9	7			
Control of variables	0	8	4	8		8	4	8	4	8	4	8	2			
Operational definitions	0	2	4	2		2	4	3	4	2	4	2	2			
TOTALS	32	30	38	32		41	48	41	48	40	52	49	32			

Average of errors in the processes made by the continuing group of : Form A : Form B
teachers, grades 1 - 3 : 35.89 23.68

COMPARATIVE ANALYSIS OF RESULTS ON FORMS [illegible] AND B TESTS GIVEN THE
CONTINUING GROUP OF TEACHERS, GRADES [illegible] IN TERMS OF
ERRORS MADE
1971-1972

Process involved in the test	No. of errors made by each teacher in each process contained in the test																					
	1		2		3		4		5		6		7		8		9		10		11	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Tables	1	2	1		2	1	3	2		1	1	1	1	1		1	1	1	3	3	3	1
Numbers	2	1		2		1	3	1	1		1	1				1	2		3		3	1
Observation											1									1	2	
Space/time relations	1		1				1		1		1		1		1				1		1	1
Inference													1	1					1	1	1	1
Classification	1	1	1				1		1		1		1		1		1		1		1	
Hypotheses	3	1	3	2	3	2	3	2	2	3	2	1	3	2	2	2	3	2	2	2	2	3
Control of variables	1	1	1	2	1	1	2	1	2	1	1	2	1	2	1		2	1	1	2	1	2
Data analysis		1			1		1		1					1			1					
Operational definitions	1		1		1	1	1	1	2			1	1	1	1	1	1	1	1	1	1	1
TOTAL	10	7	8	6	8	6	15	7	10	5	8	6	9	8	6	5	11	5	13	10	15	10

Average of errors in processes made by the continuing group of teachers, grades 1-3	:	Form A	:	Form B
	:	10.27	:	7.09

COMPARATIVE ANALYSIS OF RESULTS FROM FORMS A AND B TESTS GIVEN TO THE CONTINUING GROUP OF TEACHERS, GRADES 4-6
1971-1972

Process involved in the test	No. of errors made by each teacher in each process contained in the test															
	1		2		3		4		5		6		7		8	
	A	B	A	B	A	B	A.	B	A	B	A	B	A	B	A	B
Data Analysis	4	5	2	3	2	2	0	1	2	3	2	2	2	3	1	3
Use of Numbers	4	4	2	1	4	1	0	2	5	4	4	3	2	3	2	1
Observation	0	0	1	1	0	1	0	1	1	1	0	1	0	1	0	1
Inferences	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Classification	2	0	1	0	1	1	1	1	1	0	0	0	1	0	1	0
Charts	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0
Space/time relations	2	1	2	1	1	1	1	1	2	2	1	1	1	0	1	0
Formulation of hypotheses	3	2	1	1	2	1	1	0	2	1	1	1	1	1	1	1
Control of variables	1	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0
Operational definitions	1	1	1	1	1	1	0	0	1	1	1	1	1	0	0	0
TOTALS	17	14	11	9	12	8	3	6	14	11	11	10	9	8	6	6

Averages of errors in the processes made by the continuing group of teachers, grades 4-6	Form A	Form B
	10.75	9.00

CO RATIVE ANALYSIS FROM FORMS A AND B AGNOSTIC TESTS FOR JUNIOR HIGH GIVEN TO TEACHERS OF TH LEVEL

1971-1972

Student	Total score		% total obtained		Grade in Biology		Grade in Chemistry		Grade in Physics		Area with lowest score		Observations
	Form		Form		Form		Form		Form		Form		
	A	B	A	B	A	B	A	B	A	B	A	B	
#1	34	36	75.5%	80.0%	13	13	12	11	9	12	Physics	Chemistry	
#2	33	31	73.3%	68.8%	9	10	11	8	13	13	Biology	Chemistry	
#3	28	30	62.2%	66.6%	10	6	8	11	10	13	Biology Chemistry	Biology	
#4	27	28	60.0%	62.2%	8	9	8	7	11	12	Chemistry	Chemistry	
#5	27	27	60.0%	60.0%	11	8	6	8	10	11	Chemistry	Chemistry	
#6	24	23	53.3%	51.1%	7	8	5	4	12	11	Chemistry	Chemistry	

MOBILE UNIT

OBJECTIVES	GOALS
III. After receiving services of the resource teacher and the mobile unit of Project No. 18, 45 elementary science teachers from 16 isolated rural schools will be able to:	As a result of 39 visits by the resource teacher with the mobile unit to 16 isolated rural schools of the Humacao School District, the following have been the results:
A. Carry out laboratory activities from the process guides for grades 1-3, correlating them, insofar as possible, with the Nina and Herman Schneider series for those grades	A. With 32 teachers and 1,075 pupils in grades 1-3, 35 laboratory activities were carried out from the processes guides for those grades which used the following psychometric skills and science processes: 1. observation 2. classification 3. handling and use of test tubes 4. time and space relationship 5. demonstration and use of litmus paper 6. measurement 7. use of numbers
B. Carry out laboratory activities of the Nina and Herman Schneider series, correlating them with the science processes	B. With 15 teachers and 1,075 pupils from grades 4-6, 1,060 laboratory activities from the Herman and Nina Schneider series were performed, correlated with the following processes and psychometric skills: 1. observation 2. classification 3. measurements 4. interpretation of data 5. inference 6. charts 7. predictions
C. Use properly equipment and laboratory materials of the mobile unit that are given them on a loan basis for developing science activities in the classroom.	

OBJECTIVES

GOALS

C. Equipment and materials of the mobile science unit were used as follows:

Grade	No. of teachers served	Enrollment under these teachers	Pieces of equipment loaned	Pieces of materials loaned
1st.	11	406	49	13
2nd.	11	365	64	12
3rd.	10	304	65	20
4th.	8	263	58	10
5th.	3	334	51	7
6th.	4	396	31	3
Total	47	2,168	318	65

LIBRARIES

OBJECTIVES	GOALS
IV. After organizing two science libraries, both located in the urban zone, Antonia Sáez Elementary School and Ponce de León Junior High, with 155 books and 177 books respectively, it is expected that:	As a result of organizing two science libraries in the urban zone, Antonia Sáez Elementary School and Ponce de León Junior High, with 155 books and 177 books respectively in 1971-72 and increased to 270 and 295 respectively in 1972-73, the following was achieved:
A. The 17 science teachers in these schools will use the books in the libraries for their professional improvement	A. The 17 science teachers of these school used the books in the libraries to improve their professional competence (See Table #1)
B. The 17 science teachers of the two schools would use the libraries to enrich and/or complement teaching activities in sciences.	B. The 17 teachers and the science pupils in both schools used the libraries to complement their science activities, as specified in Table # 2.
C. Pupils at elementary and junior high levels would use library facilities to complement their school work in the area of science.	C. During 1971-72 and 1972-73, 2,104 elementary pupils and 3,718 junior high pupils used and are using library services in science to complement their school work in this area. (See Table #3).

TABLE 1

YEAR	SCHOOL	Science teachers	Teachers Visits to Library						Books loaned to teachers					
			January	February	March	April	May	Total	January	February	March	April	May	Total
1971 - 72	Antonia Sáez	10	11	19	23	26	13	92	2	6	2	7	2	19
	Ponce de León	7	9	17	12	11	12	61	9	3	3	2	3	20
	TOTAL	17	20	36	35	37	25	153	11	9	5	9	5	39
			Aug.	Sept.	Oct.	Nov.		Total	Aug.	Sept.	Oct.	Nov.		Total
1972 - 73	Antonia Sáez	10	21	32	40	14		107	4	4	2	3		13
	Ponce de León	7	14	13	19	13		59	12	18	19	5		54
	TOTAL	17	35	45	59	27		166	16	22	21	8		67

TABLE 2

ACTIVITIES	PONCE DE LEON	ANTONIA SAEZ
1. Research-investigative work	X	X
2. Look for information about a topic	X	X
3. Prepare bibliographies		X
4. Compare information obtained from different sources	X	
5. Verify conclusions reached through observations or inferences	X	
6. Prepare special projects such as collections, albums, diagrams, table, charts, etc.	X	X
7. Prepare oral reports, both individual and group	X	X
8. Carry out experiments to report to a group on results	X	
9. Get information from looking at pictures, charts, tables, etc.	X	
10. Read articles in magazines or reviews on topics being studied in the science classes	X	X
11. Prepare tapes for different purposes a. Explain one or more concepts b. Instructions for an experiment c. Review data studied d. Resume of topics discussed e. etc.	X	
12. See films, filmstrips, transparencies, etc. that clarify concepts or broaden and enrich pupil experiences	X	
13. Take part in activities that help the pupils to develop skills by which it is easier for them to use scientific methods in problem solving:	X	

ACTIVITIES	PONCE DE LEON	ANTONIA SAEZ
a. outline b. follow instructions c. distinguish between relevant and irrelevant d. classify e. follow the sequence of events f. make intelligent observations g. use the index in books h. etc.		
14.. Discuss news heard over radio or television	X	X
15. Listen to talks related to science classes	X	
16. Do assignments	X	X
17. Finish projects or experiments begun in the classroom	X	X
18. Prepare or organize material and equipment to be used in a special class or exercise	X	X
19. Give individual help to slow students (either by other student or the librarian)	X	X
20. Mount exhibitions of projects done by themselves	X	X
21. Receive parents, students and others interested in having projects or exhibitions explained	X	X
22. Offer orientation to groups on the library	X	X

TABLE 3

Year	School	Enrollment	Student visits to library					Books loaned students						
			January	February	March	April	May	Total	January	February	March	April	May	Total
1971-72	Antonia Sáez		122	196	204	299	155	976	47	21	16	9	1	94
	Ponce de León		70	82	85	315	25	577	70	59	19	13	-	180
	TOTAL		192	278	109	614	180	1,553	117	80	35	22	1	274
			Aug.	Sept.	Oct.	Nov.		Total	Aug.	Sept.	Oct.	Nov.		Total
1972-73	Antonia Sáez	645	251	283	473	121		1,128	1			1		2
	Ponce de León		308	471	650	436		1,865	44	14	4	6		68
	TOTAL		559	754	1,123	557		2,993	45	14	4	7		70

LABORATORIES

OBJECTIVES

V. By remodeling and equipping five urban junior high science classrooms and two elementary science classrooms and four second unit, elementary and junior high, science classrooms in the rural zone, it is expected:

A. 100% of the urban and rural pupils in elementary level will use laboratory facilities to carry out science activities in the classroom.

B. 100% of the urban and rural junior high pupils will use the laboratory facilities for carrying out science activities in the classroom.

GOALS

After remodeling and equipping one urban junior and two urban elementary science classrooms and four junior high and four elementary science classrooms in rural second units, in 1971-72 a total of 4,535 students benefited and in 1972-73, a total of 4,689 pupils and obtained the following achievements: (Enrollment tables for the two years are included)

1. 100% of the urban and rural elementary pupils have used and are using the laboratory facilities to develop the following psychometric skills and science processes:

   a. observation
   b. classification
   c. handling and use of test tubes
   d. time/space relationship
   e. demonstration and use of litmus paper
   f. measurement
   g. use of numbers
   h. communication
   i. inferences
   j. predictions
   k. interpretation of data

2. 100% of urban and rural junior high pupils used and are using laboratory facilities in developing the following content areas of the science class:

I. 7th grade

   A. Introduction to Biology

      1. the nature of life
      2. diversity of living organisms

OBJECTIVES	GOALS
	3. internal conditions of life 4. the animal in its development 5. communities of living organisms II. 8th grade A. Introduction to Chemistry 1. The bases of modern chemistry: development of theories for explaining combustion 2. introduction to the Daltonian concept of the atom 3. introduction to a study of chemical reactions 4. introduction to the principle of periodicity in chemical elements 5. basic aspects of the conceptual outline of the atom structure 6. chemical activity in the elements and their reaction with the theory of the atomic structure 7. some models explaining chemical reactions. III. 9th grade A. Introduction to Physics 1. movement of bodies 2. heat and physical phases of matter 3. laws governing movement of bodies 4. introduction to the concept of energy 5. heat and the theory of molecular kinetics 6. atoms, electricity and light

ENROLLMENT AND GRAD[illegible] SCHOOLS WITH SCIENCE LABORATORY

1971 - 72

Num.	School	LEVEL		GRADE										TOTALS	OBSERVATIONS
		Elem.	Jr. High	K	1	2	3	4	5	6	7	8	9		
1	Antonia Sáez	X			110	74	103	101	131	116				635	Kindergarten, 1st,
2	Luis Muños Rivera	X		49	80	85	80	94	104	112				604	2nd. and 3rd. grades
3	S. U. Pta. Santiago	X	X	49	80	63	60	80	59	59	65	40	38	593	use the laboratories
4.	S. U. Pasto Viejo	X	X		42		31	41	46	45	27	21	32	285	most of the time with
5.	S.U. Collores	X	X		25	18	18	28	26	23	78	29	36	281	materials and equip-
6.	S.U. Buena Vista	X	X		60	59	85	89	93	64	87	91	84	712	ment on loan from the
7.	Ponce de León		X								512	470	443	1,425	laboratories.
	TOTALS			98	397	299	377	433	459	419	769	651	633	4,535	

ENROLLMENT AND GRADES IN SCHOOLS WITH SCIENCE LABORATORY

1972 - 73

Num.	School	LEVEL		GRADE										TOTALS	OBSERVATIONS
		Elem.	Jr. High	K	1	2	3	4	5	6	7	8	9		
1	Antonia Sáez	X			105	90	124	93	145	124				681	Kindergarten, 1st,
2	Luis Muñoz Rivera	X		48	81	75	81	84	86	102				557	2nd. and 3rd. grades
3	S.U. Pta. Santiago	X	X	46	114	35	66	67	85	56	66	52	38	625	use the laboratories
4	S.U. Pasto Viejo	X	X		42		45	35	38	44	40	30	19	293	most of the time with
5	S.U. Collores	X	X		27	18	13	20	23	24	70	70	26	291	materials and equip-
6	S.U. Buena Vista	X	X		56	68	99	78	88	92	103	85	58	727	ment on loan from the
7	Ponce de León		X								552	505	458	1,515	laboratories
	TOTALS			94	425	286	428	377	465	442	831	742	599	4,689	

PLAN TO BE FOLLOWED IN DEVELOPING TRAINING FOR SCIENCE TEACHERS BY GRADES

I. Topic

Training 1st. to 6th. grade teachers

II. Objectives

On finishing each day's activities, it is expected the participants can

- a. understand the structure of each process guide for each grade
- b. identify and indicate the exercises that give them trouble in the classroom
- c. correlate exercises in process with the Schneider Series
- d. be able to identify materials corresponding to an exercise and a grade
- e. be trained in handling, use and function of laboratory materials

III. Materials

1. Process Guides corresponding to each grade
2. Herman and Nina Schneider textbooks
3. Laboratory equipment

IV. Activities

1. Welcome
2. Presentation
3. Discussion

A. How do we work in our classrooms?

What do we do so our pupils acquire control of a concept?

a. introduction and discussion of all the processes

b. define functionally what we mean by skills, listing and discussing each one

B. Explain the organization of the Processes Guides

a. organization

1. its composition, part by part

b. sequence and gradation of exercises

c. explanation of how each exercise in the guide is to be done

d. emphasis on the evaluation activity in each exercise and the evaluation of the pupils

C. Relation of materials to equipment as used in science

a. materials, box by box

b. materials for each grade

c. materials for each exercise

d. explanation of other activities that can be used

1. games

2. puzzles or riddles

3. creative work

D. Evaluation of day's work

1. Clear up doubts

2. General comments

3. Give questionnaire to evaluate day's activities.

TRAINING TEACHERS NOT ON THE ROUTES WHO HAVE SCIENCE EQUIPMENT AND MATERIALS

Schools	Grade	No. of teachers
[illegible].U.	First	10
Pasto Viejo S.U.	Second	9
Punta Santiago S.U.	Third	9
Urban Elementary Luis Muñoz Rivera	Fourth to Sixth	13
Totals 4 nucleis	First to Sixth	41

LP TO PRINCIPALS OF THE TRAINEES

Grade	Principal No.	Principal %	Assistants	Superintendent and Regional Supervisors	Others	Total
1	1	2%	1		1	3
2	1	2%	1		1	3
3	1	2%	1	1		3
4-6	3	6%	1	1		5
Totals 4-6	6	1.2%	4	2	2	14

Appendix #5

ORIENTATION AND CLASSES TAUGHT BY GRADES

Grade	No. orientations	No. Classes taught	Totals
I	14	5	19
II	4	12	16
III	7	18	25
IV	7	22	29
V	5	4	9
VI	2	0	2
Totals	39	61	100

ANALYSIS OF A FEW EVALUATIONS FROM TAPES BY TEACHERS USING SERVICES OF THE MOBILE UNIT

Grade	Opinion about service	Classification of service
1	The best	The best
	I believe it very useful	Magnificent
	Very favorable	
2	The best	Marvelous
	A great help	Magnificent
3	Magnificent	Of great help
	Great help	Wonderful orientation
4	Great help	Fantastic
	Fantastic	Genuinely a big help
5	Very effective	Very good
		Fantastic
6	Great help	Wonderful

MATERIALS AND EQUIPMENT 125 LOANS TO
47 RURAL TEACHERS

No.	Materials and Equipment	Grades					
		1	2	3	4	5	6
1	Construction paper	x	x	x			
2	Felt figures	x	x				
3	Color blocks	x	x	x			
4	Crayons	x	x	x			
5	Construction paper figures	x	x				
6	Wire figures	x	x				
7	Cubes	x	x				
8	Rubber balls	x	x	x	x	x	x
9	Cord	x	x	x	x	x	x
10	Cardboard thermometers	x	x				
11	Cardboard thermometers	x	x				
12	Thermometers	x	x	x	x	x	x
13	Weather maps	x	x	x			

No.	Materials and Equipment	Grade					
		1	2	3	4	5	6
14	Sandpaper	x	x	x			
15	Pictures of animals	x	x	x			
16	Seeds	x	x	x	x		
17	Gummed tape	x	x	x			
18	Pictures of fruit	x	x	x			
19	Litmus paper		x	x	x	x	
20							
21							
22	Petri dishes	x	x	x	x	x	x
23	Beakers	x	x	x	x	x	x
24	Graduated cylinder		x	x	x		
25	Burner	x	x	x	x	x	x
26	Alcohol burners	x	x				
27	Bunsen burners		x	x	x	x	x

No.	Materials and equipment	Grades					
		1	2	3	4	5	6
28	Triangle		x	x	x	x	x
29	Pipecleaners	x	x	x			
30	Meter stick	x	x	x	x	x	x
31	Straws		x	x	x	x	x
32	Wooden stick	x	x	x	x	x	x
33	Magnifying glasses	x	x	x	x	x	x
34	Slides	x	x	x	x	x	x
35	Covers, glass		x	x	x	x	x
36	Microscope		x	x	x	x	x
37	Glass cylinders		x	x	x	x	x
38	Balloons	x	x	x	x	x	x
39	Rulers	x	x	x	x	x	x
40	Graph paper		x	x	x	x	x

No.	Material and Equipment	Grades					
		1	2	3	4	5	6
41	Terrestrial globe				x	x	
42	Rubber stoppers				x	x	
43	Rubber tubing					x	
44	Sponges	x	x	x	x	x	x
45	Magnets	x			x	x	
46	Compass, magnetic	x				x	
47							
48	Protractor				x	x	
49	Compass		x	x	x	x	
50	Platform scales		x	x	x		
51	Spring scale		x	x	x	x	
52	Beam scale		x	x	x	x	
53	Lantern	x	x	x	x	x	
54	Glass dishes	x	x	x	x	x	

No.	Materials and Equipment	Grades					
		1	2	3	4	5	6
55	Phonograph records	x		x	x	x	
56	Aquarium		x	x	x	x	x
57	Forceps		x	x	x	x	x
58	Corks	x	x	x	x	x	x
59	Parafin	x			x		
60	Small glass spheres	x		x	x		
61	Nuts/washers	x		x	x		
62	Washers			x	x	x	
63	Metal file	x			x	x	x
64	Nails			x			
65	Shells	x	x	x			
66	Pictures of shells	x	x	x			
67	Candles	x	x	x	x		
68	Decimeters	x	x	x	x		

No.	Materials and equipment	Grades					
		1	2	3	4	5	6
69	Centimeter		x	x			
70	Piston		x	x	x	x	
71	Rulers		x	x			
72	Styrofoam balls	x	x	x	x		
73	Dynameters				x	x	
74	Stop watch		x	x	x	x	
75	Dry cell			x	x	x	
76	Droppers	x	x	x	x	x	
77	Test tubes	x	x	x	x	x	
78	Funnels		x	x	x	x	
79	Dominoes		x				
80	Scissors	x	x	x	x	x	x
81	Dry yeast					x	
82	Ammonia hydroxide			x	x	x	

No.	Materials and equipment	Grades					
		1	2	3	4	5	6
83	Sulphur				x	x	
84	Lime water					x	
85	Vinegar					x	
86	Bicarbonate of soda		x	x			
87	Vegetable coloring	x	x	x	x	x	x
88	Colored chalk	x	x	x	x		
89	Red ink			x	x		
90	Cobalt chloride					x	

REPORT OF WORK CARRIED OUT BY THE MOBILE SCIENCE UNIT, ELEMENTARY LEVEL, BETWEEN OCTOBER 19, 1971, AND MAY 24, 1972 PROJECT #18

Rosa M. Quiñones de Lombay
Teacher

INTRODUCTION

A. ORGANIZATION

As one phase of Project #18, Inservice training to natural science teachers, a mobile unit was set up with equipment and materials for teaching science at the elementary level and to offer services in isolated rural areas. This work was carried out between October 19, 1971, and May 26, 1972.

These services were offered, on a loan basis, to 47 science teachers (100% of total) in 16 isolated rural schools that have a total enrollment of 2,164 students from 1st. to 6th. grades.

As these are isolated rural school nuclei, the work was organized as follows:

ORGANIZATION OF ISOLATED SCHOOLS

Route	Schools	No. of Teachers	Total	Enrollment
1	Mabú	1	10	246
	Caserío Roig	3		
	Tejas II	6		
2	Mariana III	5	10	546
	Mariana IV	2		
	Mariana II	3		
3	Cataño	6	12	630
	Candelero Abajo	4		
	Punta Brava	2		
4	Antón Ruiz	3	9	425
	Mambiche Blanco I	1		
	Mambiche Blanco 2	3		
	Mambiche Blanco 3	1		
	Mambiche Prieto	1		
5	Junquito	5	6	317
	La Suiza	1		
5	16 nuclei	47	47	2,164

B. Personnel involved in developing the mobile unit

In planning and implementing the mobile science unit for elementary level, the following services were contracted:

1. Mrs. Rosa M. Quiñones de Lombay, resource teacher, elementary level
2. Mr. Juan A. Tolentino, driver

At the end of seven months of this service, we submit the objectives, activities carried out, achievements and films of these activities.

Teachers and pupils evaluated in writing the training, orientation and service in general given by the unit personnel. Some of these evaluations accompany this report, the rest are on file in the office of the superintendent of schools.

II

- a) Objectives
- b) Activities carried out
- c) Achievements
- d) Projections

III Appendices

IV Evaluations

OBJECTIVE	ACTIVITIES	ACHIEVEMENT	PROJECTIONS
1. We expect by the end of school year 1971-72 80% of the Humacao District teachers will be trained in the use of: a. Process Guides b. Herman and Nina Schneider Series c. Laboratory materials and equipment	1. Individual orientation was given to 47 teachers (100%) working in the five routes listed, specifically related to the grade where teaching and as related to their respective Process Guide-Science an Approach Based on Processes, Third Experimental Edition and the Schneider Series, emphasizing a. content b. approach based on process c. skills d. methodology e. use of materials and equipment Appendix 1	a) Greater interest was noted in the students b) It could be observed the teachers felt surer about what they were to teach in the classes	1. On organizing the school work for the next year, teachers trained this year be consulted as to whether they are interested in teaching science in the same grade for which they were trained.
	2. Individual training by grades in use of laboratory materials and equipment to: a. 10 1st. grade teachers b. 9 2nd. grade teachers c. 9 3rd. grade teachers d. 13 4th grade teachers A total of 41 teachers from 1st. to 6th grades, using for the training materials and equipment supplied the schools by the following firms:	Both teachers and pupils were observed to be using the laboratory materials and equipment in developing their class work, in preparing reports or doing special activities	2. Each science teacher is to be supplied with those basic materials and/or equipment needed for the science instruction, such as: a. microscope b. tripod c. asbestos sheets d. slides e. thermometer f. electric plate

OBJECTIVES	ACTIVITIES	ACHIEVEMENTS	PROJECTIONS
	a. Ideal b. Macalaster c. OMSI The morning from 8:30 to 12:00 was used for orientation on the structure and organization of the Processes Guides for the respective grades. The afternoon from 1:00 to 3:30 was used for orientation on use, handling and placement of materials and equipment in each grade and how to use it in each exercise. Appendixes 1 & 2 One principal attended all the training sessions in that school, two assistant superintendents attended training sessions for 1st. and 3rd. grades and for 2nd. and 4th. to 6th. grades respectively, together with the superintendent of schools and three other principals. First grade training had the help of a student from Inter American University who was doing her practice for elementary school principal. The Spanish coordinator was a visitor to the second grade training and the regional elementary science supervisor to that for the third grade. Appendix #4		

OBJECTIVES	ACTIVITIES	ACHIEVEMENTS	PROJECTIONS
	3. 5,875 pieces of laboratory materials and equipment were delivered to the 47 trained teachers, all on a loan basis, who were also interviewed on the 125 delivery visits, with training on use, handling and function of the following: a. microscope b. slides c. droppers d. 3-power magnifying glasses e. glass cylinder f. thermometers g. pipettes h. shop watch i. piston j. burners 1. alcohol 2. bunsen k. petri dishes l. scales 1. beam 2. spring 3. platform m. antibiotics n. metric measures 1. meter stick 2. decimeter 3. centimeter o. wooden sticks		

OBJECTIVE	ACTIVITIES	ACHIEVEMENTS	PROJECTIONS
	4. Orientation given to 88 teachers from 1st. to 6th. grades on how to prepare or substitute materials: a. Science in Your World: Herman and Nina Scheinder, 5th. grade, page 107, Chapter 4: Matter and Energy - Calibrating the thermometer, substituting a glass tube for a straw. b. Space and time relations Arrangements in space-To use rope, cord and colored chalk to prepare the forms of figures. c. Observation 5 Sound Perception Use any record, tuning fork, glasses with different amounts of water, to be played by fingers or with pencils, imitations by the pupils. Games: 1. Adivina, adivinador 2. La gallinita ciega d. Observation 12 Color and change of colors in plants		

OBJECTIVES	ACTIVITIES	ACHIEVEMENTS	PROJECTIONS
	Use sprouts or young branches from 1. roses 2. mango 3. cohitre rojo e. Observation 13 Observation of mold colonies Prepare mold cultures in glass or plastic containers, such as baby bottles f. Use of numbers 3 Numbers and the number line Make clocks on construction paper, fastening the arrow with a bent pin in the center, so that each child can have his own clock. Appendix #8 E. Orientation was given on some special exercises in the Processes Guides: Part I- a. Presentation of null sets b. Classification of leaves and seeds c. Perception of sounds d. Temperature observations		

OBJECTIVES	ACTIVITIES	ACHIEVEMENTS	PROJECTIONS
	Part II - Process Guide, 2nd. grade a. Symmetry b. Bacterias c. Recognizing angles and how to use them d. Metric measurements Book III, Process Guide, 3rd. grade a. Kinds of living creatures in an aquarium b. Solids, liquids, gases c. Lines, curves and surfaces d. Are squares always the same shape? e. Velocity f. Description of a phonograph record spinning g. Description and representation of energy h. Description of shadow movement in the solar quadrant F. A total of 39 individual orientations and 61 classes were given in 1st to 6th. grades. Appendix # 9 23 were demonstration classes as shown in the table:		

OBJECTIVES	ACTIVITIES	ACHIEVEMENTS	PROJECTIONS

Grade	
1	4
2	2
3	4
4	7
5	2
6	4
Total	23

(working out the exercise or part of it)

1. Classification 1

A. Classifing leaves and nuts I

2. Lakes, swamps and springs IV
3. Wind and water energy
4. Land animals - Cells V

Observation 17

5. Bacterias III
6. Wholes I and III
7. Wholes and their elements I and II
8. Angles II
9. Growth of body - Systems V
10. Insects IV

OBJECTIVES	ACTIVITIES	ACHIEVEMENTS	PROJECTIONS
	11. Temperature observation 12. Seed germination III 13. Flowers and seeds 14. Energy IV 15. Adapting to different climates 16. Multiplication III 17. Radio and television-how the eye works 18. Prehistoric animals VI 19. Matter and energy V 20. Prehistoric life IV 21. Sound waves VI 22. Metric system II 23. Matter and energy-Heat energy VI A total of 2,164 students in rural isolated areas benefited as well as 101 pupils in two Second Unit schools where three classes were taught in 3rd. to 6th. grades on the following topics: Observation 17 1. Bacteria III 2. Lakes, swamps and springs IV 3. Matter and energy V		
	G. 88 science teachers, 1st to 6th grades, were individually oriented or in groups on work techniques, since all grades from 1st to 5th use Science:	The film and diapositives show the participation of teachers and pupils in aspects and techniques of science teaching.	

OBJECTIVES	ACTIVITIES	ACHIEVEMENTS	PROJECTIONS
	An Approach Based on Process, which uses: 1. work in groups individual work 2. experiments 3. demonstrations		
	Sixth grade teachers were oriented on using materials from the Schneider Series, stressing process and skills.		
	H. To help carry out classroom activities, 200 copies of the following devices from the different Process Guides, 3rd. Experimental Edition, were made: 1. moongoose 2. stegosaurus 3. diplodocus 4. brontosaurus 5. tyrannosaurus 6. stars 7. dolls 8. sketches of animals 9. fruit apple pear banana pineapple	A total of 2,164 pupils used these copies along with 41 teachers from other school nuclei	
	Appendix 2		

OBJECTIVES	ACTIVITIES	ACHIEVEMENTS	PROJECTIONS
	Second and third grade groups used the following produced materials: 1. The clock 2. the globe 3. Observation 4. Adivina, Adivinador (game) 5. Segurita (game) 6. Measurements I. We had visits from: 1. Science Curriculum Technician, Curriculum Center, Humacao, two days 2. 13 teachers from Río Piedras School District B I. Two dissemination activities for Project #18: 1. Educational Resource Room, Department of Education, 9th floor 2. City Hall, Assembly room, Humacao.		

EXTERNAL EVALUATION REPORT

Project # 19 - Educational Resources Hall

1972 - 73

External Evaluators:

Lydia Sánchez
Alida Calderón

355/356

EVALUATION REPORT

Title III 1972 - 73 Project No. 19

EDUCATIONAL RESOURCES ROOM, DEPARTMENT OF EDUCATION

I. Introduction

The Educational Resources Room of the Department of Education is one of the projects supported by federal funds under Title III, Law 91-230, that has been functioning since 1969-70. This project has served to provide the system at central level with:

1. A center for information and propaganda of ideas in education for the purpose of strengthening instructional programs
2. A center to improve coordination and use of educational resources so as to establish an adequate communication system between the central, regional and local educational levels.
3. A center to improve communication between the community and the school, encouraging discussion that leads toward solutions to educational problems.
4. A center of activity to stimulate creative initiative of pupils, teachers and other personnel in the educational system at central, regional and local levels.
5. A center that makes possible experimentation and demonstration of innovative ideas and materials that meet the needs of the Puerto Rican school system.

The budget since the beginning of the project in 1969-70 has been $169,747.00. For the current year, 1972-73, it was $50,819.00. This budget is used to pay personnel assigned to the Room and consists of a general supervisor V, general supervisor III, curriculum technician V and secretary II. The duties of each of these are detailed in Appendix I. Funds were also used to purchase equipment and necessary materials for proper functioning of the Room and to cover travel expenses of the personnel. During this school year the following equipment and materials were purchased: a carrousel, record player, two mounting panels for placing exhibits on both sides, batteries, paper, films, etc.

Findings:

After interviews with the director of the Room and a study of available documents related to the development of the project, its operation can be described as:

A series of educational activities such as achievements in the English Program at both district and San Juan regional level and of the Bilingual Teachers Program, of the Program for Handicapped Children, the Audiovisual Program, the Social Studies Program and of programs to honor students and teachers by the Secretary's office were carried out using the facilities of the Room.

A list of activities for the year are found in Appendix II. The effect of activities on pupils, teachers and other personnel cannot be calculated since objectives are long-range and there are no data to indic achievements or permanent benefits at this moment.

As of May 1973 there had been a total of 103 activities, covering 164 1/2 days with an attendance of 8,770 persons who took advantage of these activities. Also, audiovisual production from these activities supplied the Room with 67 tapes, 143 photographs, 17 Super 8mm filmed shorts and 63 diapositives. This production is available to educators of all the Island for use in terms of the Puerto Rico educational system.

Recommendations:

In view of the usefulness of the services provided by this Room, it would be well worthwhile to consider the possibility of continuing to fund the project with local funds. Services can be so planned as to get the maximum benefit from the Room in terms of operational costs.

DUTIES OF THE DIRECTOR
EDUCATIONAL RESOURCES ROOM

1. Supervise, coordinate and direct all activities in the Room, in consultation with the assistant director and the Undersecretary, so that functions of the Room are fulfilled.

2. Supervise the duties of all Room personnel. Be responsible for supervising work plans and to see that all duties are properly performed.

3. Supervise files and informational inventories of the Room and be the final person answerable for these.

4. Keep the calendar of activities up to date and make necessary contacts for the best possible development of activities in consultation with the assistant director and the Undersecretary.

5. Control expenses of the Room to keep within the budget assigned and keep books on all outgoing or incoming monies. All purchases for the Room must have her approval, after consulting the Undersecretary and getting the latter's approval.

6. Be responsible to the federal auditor and investigators for all Room accounts.

7. Meet with her personnel when necessary for improving the functioning and order of the Room and its work.

8. Orient her personnel on their duties of work and supervise their work plans.

9. Be responsible for purchase orders and for followup and control of these.

10. Be responsible for preparing and presenting, where necessary, all official reports about the Room.

11. Coordinate the work of the Advisory and Planning Committee of the Resources Room, in consultation with the Undersecretary and other officials.

DUTIES OF THE ASSISTANT DIRECTOR
EDUCATIONAL RESOURCES ROOM

1. Take the place of the Director when the latter is away and perform those duties of the latter as well as her own.

2. Cooperate with the Director in carrying out the latter's duties.

3. Be responsible for organization and control of the library.

4. Coordinate observance of activities in the Educational Resources Room with regular instructional programs.

5. Be responsible for preparing the monthly program of activities of the Room, the monthly and annual calendar in consultation with the Director.

6. Be responsible for maintaining the register of visitors up to date.

7. Prepare with the secretary the complete card catalogue of the library:

    Title
    Author
    Publisher — Comment on each book
    Publication date
    Number of pages

8. Be responsible for all library property, for proper use and control of this and prepare an annual inventory of it. (No books or material can be removed from the site.)

9. Be responsible for arrangement of the Room and the other meeting rooms for all activities therein.

10. Be responsible for the inventory of equipment and materials of the Room: tables, chairs, panels, wall ornaments, screens, blackboards for serving refreshments, flowers, stage and watch out for the security and proper use of all and see that the doors are kept open, or closed, as may be necessary. Be responsible for the condition of the Room and maintenance of the equipment.

11. Carry out any other duties the Director, Undersecretary or Secretary of Education may assign or request.

DUTIES OF THE CURRICULUM TECHNICIAN
EDUCATIONAL RESOURCES ROOM

1. Be responsible for producing audiovisual materials for activities to be carried out in the Educational Resources Room.

2. Be responsible for keeping up to date the file of films, tapes, photographs of these activities and printed material related to them.

3. Be responsible for maintenance of audiovisual equipment and make an annual inventory of this.

4. Be responsible for cooperating with the director, assistant director and other persons in mounting exhibitions and other duties related to these programs.

5. Be responsible for preparing publicity on activities to be held.

6. Keep a cardfile with a record of all audiovisual materials in the library:

    a. materials prepared by subject matter
    b. transparencies
    c. audiovisual equipment, etc.
    d. tapes
    e. magnetic tapes
    f. video-tapes

7. Perform duties proper to the position under the direction of the director and the assistant director.

DUTIES OF THE SECRETARY II
EDUCATIONAL RESOURCES ROOM

1. Be responsible for keeping the files in order and up to date.

2. Be responsible for seeing the telephone is used only and exclusively for official purposes.

3. Be responsible for keeping correspondence and official documents of the Room up to date.

4. Be responsible for typing all purchase orders of materials and equipment needed in the Room as well as keeping files on these orders and related documents up to date and also all documents related to functions of the Room.

5. Be responsible for keeping and maintaining in good condition all equipment related to her work.

6. Be responsible for preparing requests for office materials.

7. Cooperate with the assistant director in preparing the card catalogue and inventory of books and materials in the library.

8. Perform all other duties proper to her position as directed by the director, assistant director and curriculum technician.

Appendix II

REPORT ON EDUCATIONAL RESOURCES ROOM
July 1972 - March 1973

ACTIVITIES	SPONSOR	PARTICIPANTS	ATTENDANCE	A - V PRODUCTION
1972				
13 July-Professional meeting to motivate attendance at a Seminar	Educational Extension Program	Administrative personnel of Program, Central Office	21	
14 July-Orientation meeting on Inservice Training Program, university studies	Office of the Secretary of Education	All Central Office personnel	93	Tape - 1
19 July-Interviews for position of school nurse in San Juan Educational Region	Health Program	Nursing applicants	49	
20 July-Orientation meeting on new Purchasing System of the Department of Education	Office of the Under-Secretary for Administration	School superintendents, purchasing agents, special paymasters, administrative assistants from the San Juan Educational Region	30	
24 July-Orientation meeting on teacher matriculation at the University	Area of Vocational and Technical Education,-Trades and Industry	Trades and Industry Teachers	25	
28 July-Orientation on complementary health program	Personnel Division	Personnel Division Department of Education	5	

ACTIVITIES	SPONSOR	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
2 August-Orientation on Educational system	Area of Community Relations, Office of Civic and Cultural Affairs	Group of educators from El Salvador	13	
4 August a.m.-Orientation meeting on leave with pay for study	Training Division	Teachers in active service	40	
p.m. Meeting on exchange program with University of Illinois	Division of Programs Related to Instruction, Exchange Program	English Zone Supervisors	19	
8 August-Orientation meeting on Aerospace Program	Aerospace Program	Teachers from the School Districts	39	
9 August-Orientation meeting on medical scholarships	Training Division	Scholarship holders in medicine	33	
11 August-Opening of school meeting to structure	Social studies	Supervisors and technicians of Program	23	
14,16,18 August-Training Seminar on evaluation of Essay Tests	English Program-Bilingual Education	Bilingual teachers of Title VII and teachers from the Curriculum Center	26	Tape - 1 Photos - 4
15 August-Meeting to plan activities of teachers trained in Aerospace Education	Science Program	Dr. Leticia del Rosario, Dean of Studies, UPR; Mr. W. Nixon, Space Science; technicians in the program	6	

ACTIVITIES	SPONSOR	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
17 August-Orientation meeting on Administrative topics New purchasing and payment system Problems with service of gas Appointment of field personnel	School Lunchroom Program	School Lunchroom Supervisors	154	Tape - 1
21,23,24,25 August-Seminar on training, PRIME program (Model City Area) on individualized instruction. Resources used: Miss Barbara Kuhn Mr. Bryant Stuart Westinghouse Learning Corporation	Audiovisual Program	Science supervisors and teachers, 3rd grade, PRIME program (Model City Area)	13 20 17 17 22	Photos - 7 (August 25)
22 August-Orientation meeting on "Right to Read" program	English Program	General and zone supervisors, principals and teachers working in the program	18	Tape - 1
28,29 August-Seminar on "Let's Learn English" program Resources: Miss Audrey L. Wright Dr. Robert Lugton Mr. James P. Carter	English Program	Zone Supervisors and teachers	74 68	Tape - 1

ACTIVITIES	SPONSOR	PARTICIPANTS	ATTENDANCE	A-V PPODUCTION
30 August-Professional meeting to plan development of Project 33, Title I, and prepare calendar of activities	Social Studies Program	Supervisors, coordinators and technicians of program	30	
31 August-Orientation meeting on implementing Title III projects	Division of Educational Evaluation and Development	Persons from school districts having Title III projects	43	Tape - 1
5 Sept.-Matriculation for university courses offered by the Inservice Training Program	Office of the Secretary of Education	All Central Office personnel matriculated from previous year and new candidates	139	Photos - 3 Tapes - 1
6 Sept.-Professional meeting to plan work for 1972-73	Physical Education Program	Program coordinators	10	
7 Sept.-Professional meeting to discuss plan of work for 1972-73 and orientation on curriculum reorganization in trades and industry program	Trades and Industry Program	General supervisors, regional supervisors, school principals and industrial coordinators	28	Tape - 1
8 Sept.-Professional meeting for interesting the community in resolving problems facing libraries and other programs included, for finding ways to develop leaders in the community to cooperate with the programs	San Juan Educational Region and Programs of Library, Kindergarten, Head Start and Follow Through	Personnel of the different programs	135	Tape - 1 Photos - 3

ACTIVITIES	SPONSOR	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
12 Sept.-Continuation of Training Seminar on constructing Achievement Tests	Division of Educational Development and Evaluation-Evaluation Program	Central Office and Regional Supervisors and Evaluation Coordinators	28	
13 Sept.-Orientation meeting on trades courses	Vocational Industrial Program	School principals where Office Education courses being offered for first time	34	Tape - 1 Photos - 3
14,15 Sept.-Seminar on "Lado English Series" Resource: Dr. Robert Lado (author)	English Program	Central Office and Regional general supervisors, zone supervisors school principals and teachers using the Series	143 123	Tape - 1 Photos - 4 (Sept. 15)
18,19,20,21,22,25 a.m. 27,29 Sept.-Seminar on Accountability	Division of Educational Development and Evaluation, Mathematics Program	Division personnel and school principals and teachers	35 34 38 38 36 37 37 28	Tapes - 3 Photos - 5 (Sept. 18) Photos - 8 (Sept. 29)
25 P.M., 26 Sept.-Mounting and presentation of audiovisual project "Reflection," of an informational and orientation nature	Area for Vocational and Technical Educational, Promotion and Interagency Relations Unit	Department personnel: 9:30 A.M. Floors 1, 2, 4 10:30 A.M. Floors 3, 5, 6 2:00 P.M. Floors 7,8, 9,10 3:00 P.M. (extra)	 175 225 300 25	

ACTIVITIES	SPONSOR	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
28 Sept.-Seminar on reading skills, "Right to Read" project, Title II Resource: Mrs. Rosario Montalvo de Estrada, Zone Supervisor of English, Las Marías District	English Program	Zone supervisors of English and 7th grade teachers in the project	24	Tape - 1
4 Oct.-Orientation on "Organization of Public Education System and the Regular Education Program"	Area of Communtiy Relations, Division of Civic and Cultural Affairs	Latin American Educators	31	Tape - 1 Photos - 7 (negatives)
5 Oct.-In honor of students	Area of Community Relations, Division of Civic and Cultural Affairs	Special Education students who won awards in the World Olympics 1972, last summer in Los Angeles, California	95	Tape - 1 Photos - 5 Film 8mm - 1
10 Oct.-Celebration of School Lunchroom Week, orientation with diapositives, "The School Luchroom in Action"	School Lunchroom Division	Central Office personnel	58	
17 Oct.-Meeting with Dr. Jaime González Carbó, Assistant Secretary of Education, to explain procedures to be followed for use of the Room for activities	Planning Committee, Educational Resources Room	Committee members	8	

ACTIVITIES	SPONSORS	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
19, 20 Oct.-Orientation of validation teams for Title III projects	Division of Educational Development and Evaluation	October 19 Teams from Caguas, Humacao and San Juan Educational Regions October 20 Teams from Arecibo, Mayaguez and Ponce Educational Regions	29 29	Tape - 1
24 Oct.-Seminar on "Interpersonal Relations" Resource: Mrs. Ivelisse Padró de Vega, specialist in Family Relations	Educational Extension Program, Work-Study Centers	Supervisors, principals, guidance counselors, social workers of community living in the Centers	22	Tape - 1
25 Oct.-Meeting to see samples of audiovisual materials produced by the Room and select those suitable for use in the System	Planning Committee, Educational Resources Room	Committee members	8	
26, 27 Oct.-Seminar on use and operation of special equipment, Mock-up Office, Title II	Area of Vocational and Technical Education: Division of Curriculum Development and Research, Commercial Education Program	Supervisors and teachers assigned to project	41 31	Tape - 1 Diapositives -8

ACTIVITIES	SPONSORS	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
31 Oct.-Seminar on Evaluation system and collecting data for Vocational and Technical programs	Area for Vocational and Technical Education: Commercial Education and Division for Curriculum Development and Research	Program personnel	30	Tape - 1
13-17 Nov.-Book exhibit (English) for libraries: Books on Exhibit, Mt. Kisco, N. Y. - To appreciate value of the book as a tool of culture and learning. - Developed various themes related to content of the exhibit and its purposes -Resources used: Dr. Carmen Gómez Tejera Nov. 14, with taping Mrs. Alicia Iglesias Nov. 15 with taping Mrs. Carmencita de León Nov. 16 with taping Mrs. María Isabel Flores	English Program and Libraries Division	Central Office and regional personnel, teachers, principals	45 91 36 75 52	Tapes - 3 (Nov. 14,15,16) Photos-5
15 Nov.-Meeting to plan activities for Library Week, April 9-13, 1973	Planning Committee of Room and persons responsible for this activity	Committee members and Library Division personnel, central level	9	

ACTIVITIES	SPONSORS	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
22 Nov.-Ecumenical Service for Thanksgiving	Area personnel	Area personnel and guests from Central Office	200	Tapes -1 Photos -2 Diapositives -3
28 Nov.- 1 Dec.- Showing audiovisual project "Reflection"	Area for Vocational and Technical Education: Promotional and Interagency Relations Unit	Area personnel and guests from Central Office Nov. 30: Einstein High School and Antonio Sarriera School Dec. 1: Miguel Such Metropolitan Vocational School	19 9 92	
1 Dec.-Orientation on courses at Barnard College, Columbia University, N. Y.	Area for Community Relations, Division for Civic and Cultural Affairs	Senior high school counselors	12	
4,5,6,7 Dec.-Demonstrations of Christmas arrangements	Area for Vocational and Technical Education, Home Economic Program	Central office personnel	24 25 18 28	
5 Dec.-Orientation on appointments of teaching personnel	Area for Community Relations and Personnel Division	Students, Education Course #231 UPR	12	Tape - 1

ACTIVITIES	SPONSORS	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
8 Dec.-Talk on orientation: Dr. Cáceres, College of Education, UPR	Educational Extension Division: Work-Study Centers Program	Resident counselors, vocational guidance, and social workers	35	Tape - 1
8,11,13 Dec.-Demonstration of artistic, fantasy wrappings and commercial arrangements for Christmas	Area for Vocational and Technical Education: Distribution and Marketing Program	Central Office personnel	33 31 16	
12 Dec. Seminar on training in audiovisual techniques	Division for Educational Development and Evaluation: Evaluation Program	Personnel of Evaluation Program	10	
14 Dec.-Exhibit of projects developed in the demonstration on Christmas wrappings and arrangements as made by participants	Area for Vocational and Technical Education: Home Economics and Distribution and Marketing Programs	Central Office personnel	39	8mm films -2 Diapositives -3
14 Dec.-Orientation on phase "Upgrade" in Public Services Careers Project	Area for Vocational and Technical Education: Division of Curriculum Development and Evaluation	Secretaries, Central Office	24	
18-29 Dec.-Exhibit of paintings by Mr. Cándido Gerena, Humacao citizen	School-Community Relations Program	Department of Education personnel and visitors	9 8	

ACTIVITIES	SPONSORS	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
18-20 Dec.-12M - 1:00 P.M. Filmshowings: 1. La montaña canta 2. Cantares de Navidad 3. El secreto	Educational Resources Room and Community Education Division	Central Office personnel	Dec. 18 25	
1. La guitarra 2. Cuando los padres olvidan			Dec.20 8	
21 Dec.-Christmas program by Bayamón Tuna	Area for Community Relations: Division for Civic and Cultural Affairs	Future Business Leaders of America and Central Office personnel	82	

ACTIVITIES	SPONSORS.	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
1973				
3 Jan.- Welcome to new Secretary of Education, Mrs. Celeste Benítez de Rexach	Secretary of Education office: outgoing Secretary of Education Mrs. Tania Viera de Torres	Administrative personnel of Department, Central Office	240	Tape - 1 Photos -11 (negatives)
9,10 Jan.- Showing of audiovisual "Reflection" for evaluation for future use	Area for Vocational and Technical Education: Promotional and Interagencies Relations Unit	Secretary of Education Mrs. Celeste Benítez de Rexach, Undersecretary Ramón Cruz and other personnel	6	
16 Jan.- Meeting for Secretary of Education to present other members of her administration 1. Mr. Héctor Oliver, Undersecretary for Administration 2. Dr. José Luis Soto Padín, Assistant Secretary for Planning and Educational Development 3. Miss Annie Babilonia Special Assistant in charge of Personnel affairs	Office of Secretary of Education	Department personnel, Central Office	225	Tape -1 Photos -5 (negatives)

ACTIVITIES	SPONSORS	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
17 Jan.- Orientation on advanced English Program Resources: Mrs. Carmen Judith Vilanova; Dr. Eugene Mohr from UPR; Dr. Donald Squire, Mrs. Ana Camaro, Mrs. K. Monteverde, members English Commission College Entrance Examination Board	English Program	Teachers of advanced English placement	54	Tape -1 Photos - 3
18 Jan.-Monthly training session on theme: Planning of a research project on effectiveness of technological resources in learning and analysis of concepts	Audiovisual Education Program	Program personnel	23	Tape -1
19 Jan.-Professional meeting to evaluate books for Home Economics, work performed and orient personnel on plan of work, 1972-73	Area for Vocational and Technical Education: Home Economics Program	Supervisors, technicians and in-training personnel of Program	19	
22 Jan.- Blood donations, Blood Bank, Red Cross	Area for Community Relations, Divisions for Civic and Cultural Affairs	Department personnel donating - 123	161	

ACTIVITIES	SPONSORS	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
30 Jan.- Meeting to present new Assistant Secretary for Regular Programs Mrs. Inés Julia Guzmán de Pérez and her Assistant director, Mr. Carlos M. Martínez Avilés	Office of Undersecretary Dr. Ramón A. Cruz	Area for Regular Instructional Programs, personnel	225	Tape-1 Photos-8
1 Feb.-Training meeting for personnel of Technological Education. Resource: Mrs. Sánchez	Audiovisual Education: Educational Technology Program	Audiovisual specialists	11	
2 Feb.-Orientation on implementing the Science Program at elementary and secondary levels Resource: Dr. Ian Court	Science Program	General supervisors and coordinators in Science Program	35	Tape
8 Feb.-Orientation for persons selected to work in Training Program for Bilingual Teachers	English Program	Candidates for Bilingual Teachers positions	34	Tape
13 Feb.-Training meeting on writing up operational objectives	Division of Educational Development and Evaluation in cooperation with Mathematics Program	Supervisors and coordinators of Mathematics Program, school principals and 7th grade teachers in Educational Accountability Project	27	Tape

ACTIVITIES	SPONSORS	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
14,15 Feb.-Training-Demonstration Clinic on use of equipment and preparation of audiovisual materials. Resources: Representatives from 3-M Francisco Castagnet Rahola Photo Supply Kodak Ltd. Co. Keissel e Esseul Mr. Ríos-Ponce coordinator	Audiovisual Education Program	Audiovisual supervisors and specialists and persons from the industry	Feb.14 - 78 Feb. 15 - 90	Photos
16 Feb.- Seminar on characteristics of youth from disadvantaged areas and the implications for personnel in the Centers Resources: Dr. Ana C. Cáceres, Professor, UPR., and Mr. Jorge Almodóvar, Dept. of Labor	Work-Study Centers	Directors, vocational counselors in W-S Centers and social workers	48	Tape Photo
22 Feb. A.M. Demonstration of educational materials for vocational programs Resource: Dr. Joseph Kass	Area for Vocational and Technical Education: Division for Curriculum Development and Research	Vocational program directors, Central level	15	
4:00PM -Orientation by the Secretary of Education, Mrs. Celeste Benítez de Rexach and Undersecretary for Instruction, Dr. Ramón Cruz	Office of the Undersecretary	Students of Courses No. 517 and 535, Prof. Dr. Marcano, UPR	28	Tape Photos

ACTIVITIES	SPONSORS	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
27 Feb.- Orientation on Educational Programs: Panel-Mrs. Magaly Ruiz Educational social worker; Mr. Félix Guzmán, Director, English Program for Adults; Dr. Amalia Charneco, General Supervisor Vocational and Technical Education Programs	Division for Civic and Cultural Affairs	Professional visitors and social workers from Jamaica	19	
28 Feb.-Farewell in honor of Mr. Carlos Zuazaga, Assistant Administrator,	Area for Regular Instruction Programs	Department personnel	104	Tape
Other audiovisual showings: Photographs of signatures of the Secretaries of Education	Educational Resources Room-Audiovisual Technician	Historical Archives of Department of Education		Photos - 8
Preparation in diapositives of illustrations for story: El Pollito Pintado	" "	Educational Resources Room	Total for month 366	Diapositives-22
1 Mar.-Meeting to discuss problems with distribution of food to school lunchrooms	School Lunchroom Division	Warehouse supervisor from Canóvanas, regional and local supervisors of the division	13	Tape

ACTIVITIES	SPONSORS	PARTICIPANTS	ATTENDANCE	A- V PARTICIPATION
2 Mar.-Meeting of Executive Committee, Cooperative	Central Office	Members of Credit Cooperative of Department of Education employees	9	
5 Mar.-Press conference by Secretary and Undersecretary of Education to announce Director of Government TV and radio	Office of Secretary of Education	Local press, staff of WIPR-TV and radio and Department personnel	25	Tape - 1 Photos - 2 8mm film
7 Mar.-Evaluation of project, Demonstration on Learning Problems that is being developed in Angel Ramos and Rafael Hernández Schools, Río Piedras B District	Special Education Program	Central Office and regional general supervisors of program and Program Advisory Committee members	42	Tapes - 2 photos - 4 8mm film
8 Mar.-Orientation on legal aspects related to Beauty specialists	Division of Programs Related to Instruction, Private School Unit	Specialists from Academia de Estética	21	
9Mar.- Professional meeting to present and analyze results of the test of unit on drugs and addiction in elementary school	Central Office, Health Program	Central, regional and local supervisors of health, school principals and teachers	18	Tape of introductio

ACTIVITIES	SPONSORS	PARTICIPANTS	ATTENDANCE	A-V PRODUCTION
16 Mar.- Dialogue between the Department and the universities toward a better coordination and more effective work in practice teaching	Division of Programs Related to Instruction, Practice Center Unit	Personnel from Practice Centers of the universities and supervisory and administrative personnel of the Department	21	Tape
20 Mar.-Seminar on Human Relations	Training Division	Clerical personnel, Central Office	20	
21 Mar.-Professional meeting	Special Education Program for Handicapped Children, Central and regional level	General supervisors and technicians	20	Tape - 1 Film - 1
23 Mar.-Film showing: El Resplandor, made by the Community Education Division	Educational Extension Program and Community Education Division	Central Office personnel	60	Tape - 1
P.M. Educational conference	Dr. Ramón A. Cruz, Undersecretary of Education	Students in doctoral program of Inter American University, San Juan Campus	13	Tape - 1
28 Mar.-Professional meeting for orientation	Education Extension Program: Work-Study	Center directors and General Supervisors	33	Tape - 1
29 Mar.-Prepare Room for English Festival	San Juan Educational Region, English Program			
30 Mar.-Concluding activity for English Week	San Juan Educational Region, English Program	School superintendents and principals, teachers and students	158	Films - 3 Photos - 2

VALIDATION REPORT

Project #20 - Spanish and Mathematics Levels of Achievement Within the Graded System of the Puerto Rican School

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MAYAGUEZ REGIONAL OFFICE

Validation of Project No. 20- Instruction by degree of achievement in Longfellow School, San Germán School District

COMMITTEE MEMBERS

1. Robustiano Román
2. Esperanza Ruiz
3. Juan Acevedo
4. Arminda Gandel
5. Salvador Ramírez
6. Antonia Carlo
7. Carmen L. Sánchez
8. Nilda Negrón
9. Nereida Peña
10. Betty Debién
11. Víctor Cabrera
12. Blanca C. Ramírez
13. Juan Rivera

REPORT OF THE VALIDATION COMMITTEE ON ACHIEVEMENTS OF PROJECT NO. 20, IN LONGFELLOW SCHOOL, SAN GERMAN DISTRICT

I- Project Description:

Instruction by degree of achievements in Spanish in first to third grade

According to the Project No. 20, pupils of first to third grades are grouped according to achievement in Spanish with emphasis on reading. Each group of pupils is taught by a teacher and teacher aide properly trained to provide instruction adapted to the needs and progress of the pupils. Many types of materials are prepared to suit the different levels of achievement.

II- Project objectives:

By the end of the project it is expected that:

1. the number of failures or dropouts of students will have been greatly reduced.

2. differences among individual pupils will receive proper attention in terms of achievement, especially in reading and writing.

3. project personnel will have been able to identify rather well the particular abilities of each child in:

   a. skills in oral and written communication

   b. reading skills

III- Procedures used in validation:

A- Strategies

1- Techniques or methods used in gathering evidence:

a. Meeting of Validation Committee to organize program of work for committee.

b. Meeting with administrative personnel of project for informing them on the program of work:

1- Assistant superintendent of school district
2- Assistant superintendent, Title III
3- District planner
4- Principal, Longfellew School·
5- Regional planner

c. Meeting with teachers participating in the project to hear their comments and opinions on project.

d. Meeting with teacher aides working in the project.

e. Interviews with teachers of other subjects and who were not involved in the project to learn their opinions about the project and the impact it had .

f. Questionnaire to participating third grade pupils to ascertain project impact on them.

g. Classroom visits to observe teaching activities at first hand.

Grades observed:

First grade- Level I

Second grade- Level II

Third grade- Level III

h. Administration of test to check achievements claimed in terms of reading.

1- Speed in reading and comprehension of pupils in grades, 2, 3, and 4 who are now or have been in the project.

2. Phonetic levels of clientele in second grade

i. Analysis of materials produced for possible dissemination

B- Examination of documents:

1. Lists of pupils in first, second and third grades in the different levels, 1971-1972

2. Diagnostic instruments used at beginning of project

3. Table comparing current and initial situation

4. Achievement tests given

5. Grades obtained by pupils in Spanish and other subjects in 1970-1971 and 1971-1972

6. Plan book and other teacher records

7. Teaching materials and audiovisual helps

8. Tables showing failures and dropouts

Activities Carried Out by Committee Members

Dates	Activities	Purpose	Length	Place	Participants	Instruments
Tuesday November 14, 1872 A.M.	1. Meeting with directive personnel	1. Establish rapport and answer questionnaire	8:30 - 9:30	Superintendent's office	Full Validation Committee	
	2#. Meeting with teachers	2. Establish rapport and procedure to be followed	10:00 - 11:00	Longfellow School	Full Validation Committee	
	3- Meeting with aides	3. To establish rapport and procedure to be followed	11:00 - 12:00	Longfellow School	Full Validation Committee	
P.M.	4. Meeting with pupils and teachers of other subjects who were not in the project	4. To verify identified achievements	1:00 - 4:00	Longfellow School	With teachers: 1. Carmen L. Sánchez 2. Juan Acevedo With pupils: 1. Hilda Negrón 2. Antonia Carlo	
	5. . Review information and teaching materials a. What materials used? b. How used?	5- Examine diagnostic instruments and results at beginning of project 5a- Determine ways or procedures of attack	1:00 - 4:00	Longfellow School	1. Juan Rivera 2. Salvador Ramírez 3. Blanca Ramírez	Annual reports 1970-71, 1971-72. 1) Lists of 1st, 2nd, 3rd pupils in Levels I, II, III 2) Diagnostic instruments and results at beginning of project 3) Questions and observations in terms of strategies of attack used by teachers

Dates	Activities	Purpose	Length	Place	Participants	Instruments
Nov. 14 cont.		5b. Determine technical helps used 5c. Examine instruments used to determinesuccesses in achievements				in teaching materials and audio-visual aids 4. Analyze tables comparing current and beginning situation 5. Examine instruments that verify achievements: a. Normalized intelligence tests given in the Region b. Grades distributed in Spanish 1970-71, 1971-72 c. What improvement in other curriculum subjects. Grades for year
Wednesday, Nov. 15	6. Observe classes at different achievement levels in 1st - 3rd grades	6. Confirm success attained	8:00 - 9:30	Longfellow School	1. Esperanza Ruiz 2. Robustiano Román 3. Arminda Gandell 4. Víctor Cabrera 5. Carmen L Sánchez 6. Salvador Ramírez 7. Blanca Ramírez 8- Antonia Carlo	Assignment of classroom visits: First Grade: First Level 1. Esperanza Ruiz 2. Juan Acevedo 3. Robustiano Román Second Grade:Second Level 1. Arminda Gandell 2. Víctor Cabrera 3. Carmen L, Sánchez Third Grade: Third Level 1. Blanca Ramírez 2. Salvador Ramírez 3. Antonia Carlo

Dates	Activities	Purpose	Length	Place	Participants	Instruments
Wed. Nov 15 cont.	7. Administer tests	7. Confirm success attained	9:30 - 4:00	Longfellow School	Teams that observed classes	Reading tests: Types 1. Speed and comprehension at all levels, I, II, III 2. Phonetic Achievement at Level I or clientele belonging to 2nd grade
Friday, Nov. 17	8. Meeting of Validation Committee	8. Analyze findings and reach conclusions	9:30 - 4:00	Superintendent's Office	Validation team	1. Data gathered about: a. Information on current and beginning situation b. Results of verification of results from information obtained 2. Prepare conclusions in line with the situation as found

IV- Results of Validation

A- Achievements to be validated, stated briefly

1- Academic achievement

2. Materials produced for individualized teaching

3. Use of educational technology

4. Effective use of resources:

- teacher aide
- coordinator in reading
- coordinator in educational technology

B- Transferable achievements

1- Teaching and audiovisual materials listed in the document Evaluation of Materials and Devices, submitted by Committee members, to see whether recommended modifications and corrections had been made

We include data to substantiate this statement

1. Memorandum dated May, 10, 1972, sent by general supervisors of Spanish to Mrs. Carmen Díaz de Olano, Director of Spanish Program

2. Memorandum dated November 13, 1972, from Mrs. Annie de Arteaga, General Supervisor of Spanish, to Mrs. Carmen Díaz de Olano, Director of Spanish Program

3. Evaluation of materials and devices by the Validation Committee

C. Progress attained by clientele

1. It was impossible to determine precisely the academic achievement of the pupils since the project objectives are not adequate and lack specific goals. Such a situation makes it necessary to recognize as an achievement any change, even though less than to be expected in a normal situation.

2. With no control groups it was not possible to compare achievement of project pupils with those outside the experiment

3. Evidence on progress is the following:

Per cent of pupils who passed from one level to another

Grade	1970-71	1971-72
First Grade	40.5%	34%
Second Grade	31.0%	17%
Third Grade	15.0%	34%

V- Cost analysis

In 1970-1971 the cost per pupil in the project was $325.41

In 1971-1972 the cost per pupil in the project was $349.00

The cost per student in the regular program is $360.00

Benefits cannot be validated as there is no control group in the regular instructional program, as has been stated.

Cost analysis is included. (See appendix No. 8)

VI- Complete check list included in validation plan for Title III projects (See Appendix No. 10)

VII- Recommendations and general conclusions

1. The project can be transferred if:

it is possible to use it with the Spanish program according to established academic policy;

reliable criteria and norms are established for placing pupils in the different levels;

teachers are oriented on proper use of strategies and techniques for taking care of the different levels within a grouping;

all the school faculty and principal of the school take part in the project;

reading is treated as a means and not an end in itself;

duties of the teacher aide are clarified;

the project coordinator receives help from the Spanish Program, both regional and central level;

the audiovisual technician receives adequate help.

VIII- Documents used by the Validation Committee

1. Questionnaire used by the Committee for the initial interview with project personnel

2. Questionnaire for interviews with teachers of other subjects, who are not in the project.

3. Questionnaire for third grade students in the project

4. Guide for observation in classroom visits

5. Achievement tests given and tabulation on pupils in the project

6. Charts on improvement in achievement shown by pupils on passing from one level to another in 1970-1971 and 1971-1972

7. Cost analysis for 1970-1971 and 1971-1972

8. Project No. 20 sample-total enrollment first to third grades

9. Memorandums from Spanish Program, May 10 and November 13, 1972.

10. Resume of check sheet, Validation Process

11. Student placement by levels in 1970-1971 in Longfellow School

12. Evaluation of materials and devices.

VALIDATION PROCESS

Title of Project: #20

District: San Germán Date: November 17, 1972

I- Indicate by a check mark in the proper column your rating of each area according to the following scale:

0- none present
1- unsatisfactory
2- satisfactory
3- outstanding
4- excellent

AREAS	0	1	2	3	4
1. The strategy (s) used in the project helps to solve the problems identified in the study of needs.		x			
2. The project presents evidence to prove the operational objectives were effectively achieved	x				
3. The project offers evidence that the instruments used provide objectives, reliable information		x			
4. The project offers a cost-effective analysis that reflects a relationship between costs and performance by the participants.	x				

AREAS	0	1	2	3	4
5. The cost-effective analysis indicates adoption is practical (Money invested is justified in terms of production)	x				
6. The project is usually observable and communicable.				x	
7. The project has concepts or practices recognized as original unusual and exemplary.		x			
8. The project offer innovative procedures, techniques and practices that can be shared.		x			
9. The project makes a significant contribution to the educational system		x			

II- Explain your rating

See the narrative report of the group

EVALUATION OF MATERIALS AND DEVICES

PROJECT NO. 20

Report submitted by the committee that studied the material prepared in project No. 20 in the Longfellow School, San Germán.

The project has some valuable material that properly used will be a great help for improving the learning-teaching quality. Some of this material is transferable if is it modified and corrected.

Some corrections suggested:

I- Transparencies prepared for dramatization of the story

Three Little Kittens should be improved in the technical part.

Transparency # 1- Title is not legible. Nothing should be seen in the background of the scene. Some novelty element should be included in presenting the title.

Transparency # 3- Light leakage in the visual

Transparency # 5- Colors seem repeated in the mittens. Cover the edge of the visual

Transparency # 6- Light leakage in the visual. Improve the contrast of colors in the puppets

A transparency should be added to identify the project and so give credit to the collaborators. There should be a musical introduction to the tape. Only one narrator should be used on the tape. A guide suggestions about using the visual should be prepared.

II- Public servants

The diapositives are well made.

The narrative should be improved in the following aspects:

1. The narrator speaks too fast.
2. An introduction related to the topic should be used at the beginning of the narration.
3. In the diapositive of the teacher, she should be reading a book or pointing to a sentence.
4. The diapositive of the policeman should be at pedestrian crossing.
5. The diapositive of the doctor should be made again.

III- A Trip to San Juan

Improvement is recommended in the following diapostives:

1. Change the title.
2. Add a diapositive of the pupils getting out.
3. Add other diapositive of interesting places in the course of the trip.
4. Repeat all the tape again.
5. The narrator speaks too fast.
6. Prepare a guide for correct use of this project.

IV- Farm Animals

The following diapositives should be improved

1. The first diapositive should be a view of the farm.
2. Add other diapositive of the animals according to the narrative.

3. The diapositive of the dog should be improved by using different dogs performing different actions

4. In the diapositive of the goat the phrase "lives in high places" should be eliminated from the tape

V- The Little Fish (Puppet play)

The following diapositives can be improved:

1. The introduction should appear in the guide
2. Title and list of characters should be presented against a musical background.
3. A child's voice should be taped in the proper parts
4. The narrator drops his voice at the end of a sentence.
5. Another diapositive is needed at the end of the project.

Conclusions:

The rest of the materials prepared should be disseminated but the center where the Project No. 20 is located can serve as resource to other schools' in the district and offer ideas for use in the classroom. Transference of books prepared in the project is not recommended. Read memorandums of May 10 and November 13, 1972, of the Spanish Program Department of Education.

APPENDIX NO. 1

Project No. 20

Questions- Validation Committee

1. In what way is the project innovative?

2. Of the innovations, identify those innovative aspects that can be transferred to other schools.

3. In what way can these innovations be transferred and with what modifications? Explain.

4. What experience have you had, if any, with transferring aspects of the project?

5. To what extent were the objectives of the project attained? Explain.

6. What impact has the project had on the school where it has been developed?

7. How do you see the project in terms of impact on the school in general, on teachers, students, community and school administration?

8. When Title III funds are exhausted, what are future plans for the experiences gained? What would you do with the innovations? What is the future of the project?

9. Is the district carrying out studies for getting clientele to whom to transfer the project? If not, what arrangements are being made?

APPENDIX No. 2

VALIDATION PROCESS

TITLE III- PROJECT No. 20

Questionnaire for interviewing teachers who did not participate in the project (4th, 5th and 6th grade teachers)

1. In what way did you take part in the project?
2. Do you think the project has affected the achievement of your students? How?
3. How do you think your students who have been part of the project compare with those who did not participate in their control of reading skills and the transference of these to other subjects?
4. In what way have you benefited from materials in the project?
5. According to the results you have observed, would you recommended the project be transferred to other schools and districts? Why?
6. What suggestions do you have for improving the project?

Appendix No. 3 - Questionnaire for third grade students in the project

VALIDATION COMMITTEE

PROJECT # 20

San Germán, Puerto Rico

Name______________________Date________________________

Grade_____________________Level________________________

Check the correct answer

1. Before being in the reading project:

________a. I read easily

________b. I had trouble reading

________c. I read isolated words

________d. I could not read

2. After being in the reading project:

_______a- I read easily

_______b. I have trouble reading

_______c. I read only isolated works

_______d. I still cannot read

3. The help I have had in Spanish classes has helped in other subjects:

_______a. very much

_______b. some

_______c. little

_______d. not at all

4. The varied activities of the project have resulted in:

_______a. My attending school regularly

_______b. My being about often

_______c. My coming later often

______d. My cutting classes

5. The materials we use for reading and writing have helped me:

______a. very much

______b. some

______c. little

______d. not at all

6. Through reading have learned to find the main idea of a selection

______a. very easily

______b. quite easily

______c. not very easily

______d. I don't know how to find the main idea

7. This experimental reading project should be extended to:

______a. other rooms

______b. other school

______c. other district

______d. to no place

8. I have been changed from groups

______a. once

______b. twice

______c. more than twice

______d. never changed

9. The help from the teacher, the aide and the reading coordinator has been

______a. very much

______b. some

______c. little

______d. none

10. I think the reading project

______a. has made me more interested in reading

______b. has left me with the same interest as before

______c. has given me very little interest in reading

______d. has given me no interest in reading

APPENDIX No. 4

Guide for Observing and discussing a class

1. What are the objectives of the class? Were these attained?

2. What beginning activities were used?

3. What learning activities were used?

4. What evaluative activities were used?

5. What relation was there between objectives and activities?

6. What teaching techniques were used? Did these contribute to making the pupils more independent in study and work at the same time as they were developing skills in use and application of what they were learning?

7. How were individual differences in the pupils taken care of in developing the class? Did the teacher seem to understand and know the children?

8. What teaching materials were used? Were these used in the proper way and effectively?

9. Was the teacher in control of the content of the material being taught?

10. Did all the pupils participate? What was the teacher's attitude in this aspect?

11. Were new approaches used in the class?

12. What did the pupils learn to do?

APPENDIX NO. 5

Tests and Tabulation

1. Level of Phonetic Achievement: Level I, students in 2nd. grade

Criteria:

a. Test on progress in use of phonetic analysis

The reading material should show distinct levels of achievement, i.e:

1. three levels in the initial stage
2. beginning of the level of rapid progress stage

Procedure:

1. Test on achievement in use of phonetic analysis

Description:

a. Representative vocabulary will be used at all levels of achievement covered in the initial stage and that indicated at the beginning of the rapid progress stage.

b. This vocabulary will be presented in two ways: exactly as it appears in the book and also changing it without affecting its phonetic structure to find out to what degree phonetic analysis is used when faced with new vocabulary.

c. Books used for this purpose will be preprimer, primer, first book and "Del Campo al Pueblo."

d. The test will consist of reading material based on a topic and in coherent, correctly organized sentences.

APPENDIX No. 5A

Teaching reading in the primary grades

EVALUATION

Prepared By

Patría Charneco
Virginia Gaud de Toro
Eneida Colón
Ramonita Mercado
Gracia Paredes
Fany Cordero
J. González
María L. Chaparro
Margarita Acosta
Rosario Perea

Principals of Elementary Urban Schools
Mayaguez District

Esperanza Ruiz	Resource teacher
Brunilda Cruz de Lugo	Asist. Superintendent
Blanca C. Ramírez	General Supervisor

I- Advice to teacher or person administering the test

The purpose of this test is to explore how much readers in the beginning stage need to improve in fluency and in comprehension of what is read.

Consequently, reading material for the test is taken strictly from the vocabulary of the pre-primer text. It is recommended for only those pupils who have learned the vocabulary of the pre-primer.

II- Procedure for administering the test for comprehension will be the same as that recommended for reading directed at the basic text, i.e:

1. permit silent reading of the selection on which the question to be answered is based
2. Have the answer given inmediately after the selection has been read
3. Have the pupil check the choice in the exercise that in his judgement is correct.
4. Continue the test in this same way until all questions or exercises are finished..i.e, with silent reading of a selection followed immediately by the answering of the corresponding question or exercise

III- Test content

This test is composed of questions to be asked orally by the teacher based on the reading selection and of the corresponding exercise for answering by the pupil

EXERCISES

Check the best answer:

1. The story is about:

__________a. when is Day for Old People

__________b. Pepe's news about the Day for Old People

____X____c. celebration of the Day for Old People in Ana's and Pepe's school after Easter vcacation.

2. The Day for Old People was celebrated in Ana's and Pepe's school

____X____a. Friday after Holy Week

__________b. when Pepe gave the news about the Day for Old People

__________c. when Ana proposed having a party for the grandparents

3. The children and teacher in Ana'a and Pepe's school got ready to celebrate the Day for Old People

__________a. making invitations only

__________b. preparing a program of songs, a story and poetry only

____X____c. making invitations and preparing a program of songs, stories, poetry

4. The program of the party for the Day for Old People was:

__________a. songs, stories and poetry by the pupils

__________b. songs, stories and poetry by the old people

____X_____c. songs, stories and poetry by the pupils and the old people.

5. The pupils prepared invitations for:

__________a. their grandparents

____X_____b. grandparents and other old people of the town

__________c. the old people of the town

6. The party for the Day for Old People was very successful because

____X_____a. The pupils and old people had a good time together

__________b. there were songs and poetry by the pupils

__________c. there were songs and stories by the old people.

APPENDIX No. 5B

COMMONWEALTH OF PUERTO RICO
OFFICE OF THE SUPERINTENDENT OF SCHOOLS
DEPARTMENT OF EDUCATION

Reading Situation (Levels)

School Longfellow Teacher

Date November 15, 1972 Grade Second Grade

Group Active enrollment

A- Summary of Results

1. Phonetic Level Books	2. Number of Students
Pre Cartilla	4
Cartilla	4
Libro Primero	3
Pueblo y Campo	11
Others	2
Total:	24

APPENDIX No. 5C

Norms to determine reading level

Grade II Words per minute____

Pupils	No. of words per minute	% Comprehension	Reading Levels		Slow
			Independent	Instruction	
1. Castillo, Héctor	31	90%	x		
2. Martínez, Jeraldine	75	90%	x		
3. Irizarry, Marisol	50	90%	x		
4. Noel, Jessica	98	90%	x		
5. Valdéz, Ileana	75	90%	x		
6. Vidal, Victor	89	90%	x		
7. Flores, Hernán	55	70%		x	
8. Guzmán, Daniel	42	60%		x	
Matos, Nelson	52	80%		x	
10. Morales, Ninette	65	50%		x	
11. Morales, Elmer	72	80%		x	
12. Ortíz, Norberto	50	50%		x	
13. Ortíz, Zenaida	38	50%		x	
14. Pagán, Jaquelin	98	70%		x	
15. Rivera, Alexis	86	70%		x	
16. Rivera, Eddie	98	70%		x	
17. Rodríguez, William	57	80%		x	

Grade________ Words per minute__________

Pupils	No. of words per minute	% Comprehension	Reading Levels		
			Independent	Instruction	Slow
1. Ruiz, Joelly	98	70%		x	
2. Ruiz, Virgenmina	42	70%		x	
3. Santiago, Elizabeth	61	70%		x	
4. Santiago, María V.	65	80%		x	
5. Toro, Wanda	58	80%		x	
6. Vázquez, Maribel	46	60%		x	
7. Vázquez, Pedro P.	70	60%		x	
8. Vega, Carlos	55	70%		x	
Velázquez, Angelo	45	60%		x	
10. Quiñonez, Javier	46	70%		x	
11. Molini, Rosa	37	1%			x
12. Murphy, Tomás	0	1%			x
13. Ortíz, Claribel	35	40%			x
14. Pagán, Norma	73	20%			x
15. Rodríguez, Jesús	39	30			x
16. Rodríguez, José L.	29	0			x
17. Rossy, Marxial	39	0			x
18. Sulsona, Gerardo	36	20			

APPENDIX No. 5D

READING BY LEVELS

School Longfellow Teacher

Date November 15, 1972 Grade III

Group Active enrollment

A- Resume of results

Phonetic level	No. of pupils
Pre-primer	0
Primer	0
First Book	2
Pueblo y Campo	21
Others, specify	0
Total	23

APPENDIX No. 5E
Norms for determining reading level

Test for speed and comprehension

Grade__________Words per minute__________

Pupil	Words Per Minute	% Comprehension	Independent	Instruction	Slow	Comment
1. Rodríguez, José L.	83	100%	x			
2. Cancel, Braulio	50	50%		x		
3. Figueroa, Ramón	88	50%		x		
4. Nazario, Miguel	19	66%		x		
5. Rodríguez, Evelyn	65	50%		x		
6. Quiñonez, Iván	131	66%		x		
7. Castro, Milton	66	50%		x		
8. Feliberty, Ramón	51	66%		x		
9. Rivera, Madeline	88	50%		x		
10. Alicea, Gabriel	63	66%		x		
11. Massonet, Rafael	57	83%		x		
12. Quiñones, Claribel	80	67%		x		
13. Castillo, Luis A.	84	50%		x		
14. Jusino, Miguel	60	83%		x		
15. Torres, Lissete	80	66%		x		
16. Maléndez, Sonia	164	50%		x		
17. Santana, Betty	77	66%		x		

Norms for determining reading vel

Test for speed and comprehensiob

Grade__________Words per minute__________

Pupil	Words per minute	% Comprehension	Independent	Instruction	Slow	Comments
Ramos, Roberto	79	66%		x		
2. Torres, Elba	80	50%		x		
3. Toro, Ana Lissette	76	50%		x		
4. Lugo, José Fco.	49	50%		x		
5. Ayala, Angel L.	77	83%		x		
6. Irizarry, Angel	43	33%			x	
7. Tirado, Alba	27	33%			x	
8. Luciano, Eduardo	52	16%			x	
9. Rivera, Sandra	74	33%			x	
10. Flores, José L.	63	16%			x	
11. Vázquez, Eduardo	43	16%			x	
12. Avilés, Freddy	63	33%			x	
13. Santiago, Rosa	66	33%			x	
14. Padilla, Carlos	95	33%			x	
			4/5			

APPENDIX No. 5F

READING BY LEVELS

School Longlellow Teacher ______

Date 15/11/72 Grade III

Group ______ Active enrollment ______

A- Resume of results

Phonetic level	No. of pupils
Pre-primer	1
Primer	3
First Book	1
Pueblo y Campo	23
Others, specify ______	
Total:	28

APPENDIX No. 5G

READING BY LEVELS

School Longfellow Date November 15, 1972

Teacher ________ Active enrollment ________

Grade III Group ________

Names		A jugar y a gozar Pre-primer	A la Escuela	Amigos de Aquí y de allá	Pueblo y Campo	Comments
1. Carmen R. Caraballo					X	
2. Carmen Flores Morales					X	
3. Ubaldo Rivera					X	
4. Blanca García					X	
5. Wanda Torres Vega					X	
6. Iván Rivera					X	
7. Rafael Santana					X	
8. Reinaldo Vargas Santana					X	
9. Jorge Rodríguez					X	
10. Jaqueline Flores					X	
11. Dora Rodríguez					X	
12. [illegible]me Rosado				X		
13. Javier Aponte					X	
14. Blanca Vega					X	
15. Héctor D. Casiano					X	
16. Awilda Figueroa					X	
17. Carlos Torres			X			
18. Evelyn Ortíz					X	
19. Carlos E. Vilanova					X	
20. Carlos Meléndez					X	
21. Santiago Meléndez					X	
23. Ramón Torres			X			
24. Luis G. Vázquez					X	

READING BY LEVELS

School____________________ Date_______________

Teacher____________________ Active enrollment_______________

Grade____________________ Group_______________

Names		A Jugar y a Gozar Pre-Primer	Amigos de Aquí y de Alla	Pueblo y Campo	A la Escuela	Comments
25. Efraín Pabón Alicea					X	
26. Santos Ojeda		X			X	
27. Madeline Rivera			X		X	
28. Dalila Cintrón					X	
29. Elizabeth Rodríguez					X	

APPENDIX No. 6

Project Num. 20

Achievement improvement shown by pupils on passing from one level to the next

Comparison of pupils by levels and mental ability

Level %	Pupil	%	Pupil	%	Pupil	%
76-99	19	54%	01	04%	00	00%
51-75	11	31%	11	41%	01	10%
26-50	05	* 15%	09	33%	04	40%
0-25	00	00%	06	** 22%	05	50%
-----	35	100%	27%	100%	10	100%

* 15% of pupils in the first level have ability at the level of the second quartile

** 22% of the pupils at second level have a mental ability at the level of the first quartile.

APPENDIX No. 7

First Grade

1970-71

Level I

23 of level 1 remained at the level 1	100%

Level 2

18 of level 2 passed to level 1	75%
6 of level 2 remained at same level	25%

Level 3

18 of level 3 passed to level 2	49%
17 of level 3 remained at same level	46%
2 of level 2 passed to level 1	05%

Level 4

11 of level 4 remained in same level	61%
5 of level 4 passed to level 3	28%
2 of level 4 went to a group of mentally retarded	11%

Second Grade

Level 1

28 of level 1 remained at same level	80%
7 of level 1 passed to level 1	20%

Level 2

18 of level 2 passed to level 1	53%
16 of level 2 remained at same level	47%

Level 3

17 of level 3 passed to level 2	61%
11 of level 3 remained at same level	39%

1970- 1971

Second Grade

Level 4

8 of level 4 passed to level 3	27%
5 of level 4 passed to level 2	18%
16 of level 4 remained at same level	55%

Third Grade

Level 1

36 of level 1 remained at same level	100%

Level 2

26 of level 2 remained at same level	79%
8 of level 2 passed to level 1	21%

Level 3

4 of level 3 passed to level 2	12%
1 of level 3 dropped to level 4	03%
28 of level 3 remained at same level	85%

Level 4

28 of level 4 remained at same level	100%

* % of student who went from one level to the next

in first grade	40%
in second grade	31%
in third grade	15%

1971-1972

First Grade

Level 1	
30 of level 1 remained at same level	100%
Level 2	
13 of level 2 passed to level 1	37%
22 of level 2 remained at same level	63%
Level 3	
9 of level 3 passed to level 2	27%
24 remained at same level	73%
Level 4	
10 of level 4 passed to level 3	37%
17 of level 4 remained at same level	63%

Second Grade

Level 1	
34 of level 1 remained at same level	100%
Level 2	
11 of level 2 passed to level 1	34%
6 of level 2 dropped to level 2	18%
15 of level 2 remained at same level	48%
Level 3	
34 of level 3 remained at same level	100%

Third Grade

Level 1

36 of level remained at same level	100%

Level 2

8 of level 2 passed to level 1	32%
17 of level 2 remained at same level	68%

Level 3

6 of level 3 passed to level 2	23%
20 of level 3 remained at same level	77%

Level 4

13 of level 4 passed to level 3	48%
14 of level 4 remained at same level	52%

* % students who passed from one level to the next

First Grade	34%
Second Grade	17%
Third Grade	34%

Fourth Grade Pupils

Spanish averages in 1st. to 3 rd. grades

Grades 1 to 3 Total pupils 115

29 pupils had same average for 3 years	25.2%
22 pupils dropped their average from 1st to second grade but later raised it in third grade	19.1%
48 pupils lowered their averages in all three years	41.8%

14 pupils raised their averages in all three years	12.1%
2 pupils raised their averages from 1st. to 2nd. grade but later dropped from 2nd. to 3rd. grade	1.8%
	100.0%

$\frac{65}{115}$ - .56 - 56% showed improvement in Spanish

Fourth grade pupils

Average in other subjects compared to those in Spanish in third grade

8 Pupils with higher averages in other subjects than in Spanish	7%
49 Pupils with lower averages in other subjects than in Spanish	43%
58 Pupils had similar averages in all subjects	50%
	100%

* $\frac{66}{115}$ - .57 - 57% showed achievement in other subjects compared to Spanish

APPENDIX No. 8

Cost Analysis

BUDGET : $39,110.00

BUDGET: $40,428.00

	1970-1971		1971-1972	
ITEMS	BUDGET	AMT SPENT	BUDGET	AMT SPENT
A. Personnel				
9 Teacher aides	$27,000.00	$27,000.00	$27,000.00	$27,000.00
1 Audiovisual coordinator	3,000.00	2,400.00	3,720.00	3,720.00
1 Reading coordinator	2,000.00	--	2,000.00	1,201.50
1 Mathematics coordinator	2,000.00	--	2,000.00	--
B. Miscellaneous	500.00	399.93	500.00	490.25
C. Fringe Benefits	4,610.00	3,792.60	5,208.00	4,371.89
	$39,110.00	$33,592.53	$40,428.00	$36,783.64

REFERENCE FOR ESTIMATING DEPRECIATION

Principles of Accounting-Introductory
Finney and Miller-6th edition - 1953
Prentice- Hall Inc. Pág. 204-205

INFORMATION USED FOR PREPARING COST ANALYSIS

1. Personnel Roster
2. Project budget
3. Bills and statements
4. Inventories of books and equipment in the district
5. Personnel interviews
6. Reports on transportation and school lunchroom

USE OF FUNDS-AUGUST 1970--JULY 1971

GENERAL BUDGET: $39,110.00

A- Personnel 34,000.00

	BUDGET	EXPENSES	OBLIGATED EXPENDITURES	EXCESS
9 Teacher aides	$27,000.00	$13,500.00	$13,500.00	-
1 Audiovisual Coordinator	3,000.00	1,200.00	1,200.00	$ 600.00
1 Reading resource	2,000.00	--	--	2,000.00
1 Mathematics resource	2,000.00	--	--	2,000.00
B- Miscellaneous	500.00	399.93	100.07	-
BALANCE	$34,500.00	$15,099.93	$14,800.07	4,600.00
C- Fringe benefits	4,610.00	3,792.60	--	817.40
	$39,110.00			

COMPONENTS	NUMBER	PART TIME	FULL TIME	REGULAR PROGRAM	TITLE III	OTHER	TIME WITH PROJECT	COST OF PROJECT
I- PERSONNEL								
A- Instructional Personnel								
1. Elementary principals	1		X	7,800.00			50%	$3,900.00
2. Elementary teacher, 1st. 3rd. grade	11		X	67,020.00			20%	13,404.00
1 at $575.00 per month								
6 at $525.00 per month								
1 at $500.00 per month								
1 at $485.00 per month								
1 at $475.00 per month								
1 at $400.00 per month								
3. Teacher aides								
$250.00 monthly ea	9		X		27,000.00		100%	$27,000.00
4. Social Worker	1		X	7,320.00			25%	1,830.00
5. Others								
a. Asst. Superintendent D.D.	1		X		2,600.00		33 1/3%	2,600.00

COMPONENTS	NUMBER	PART TIME	FULL TIME	REGULAR PROGRAM	TITLE III	OTHERS	TIME WITH PROJECT	COST TO PROJECT
b. Local Planner	1		X		$2,800.00		33 1/3%	$2,800.00
c. Regional Planner	1		X		3,200.00		33 1/3%	3,200.00
d. Audiovisual Coordinator	1		X		2,400.00		100%	2,400.00
e. Regional Supervisor Spanish	1		X	7,800.00			6 2/3%	520.00
B. Classified Personnel								
Janitor , $250.00 monthly ea.	3		X	9,000.00			20%	1,800.00
Watchmen, $250.00 monthly ea.	1		X		3,000.00	3,000.00	20%	600.00
Total A ⌿ B				98,940.00	38,000.00	3,000.00		22,054.00
C. Fringe Benefits								
1. Instructional personnel								
Bonus 3%				2,788.20	1,140.00			1,337.00
Retirement 8.5%				7,914.90	3,230.00			4,692.00
State Insurance fund 1.4%				1,385.16	380.00			552.00

COMPONENTS	NUMBER	PART TIME	FULL TIME	REGULAR PROGRAM	TITLE III	OTHERS	TIME WITH PROJECT	COST OF PROJECT
2. Classified Personnel								
Bonus 3%				270.00		90.00		
Retirement 5.5%				495.00		165.00		
State Insurance fund1.4				126.00		42.00		
Social Security 4.8%				432.00		144.00		
Total fringe benefits				12,916.26	$4,750.00	441.00		$6,348.00
D. Health services $5.00 ea.				1,020.00	780.00	60.00		780.00
Total A ≁ B ≁ C ≁ D				112,876.26	43,530.00	3,501.00		67,182.00

II- EQUIPMENT

	NO. UNITS	UNIT PRICE	TOTAL COST	USABILITY	ANNUAL DEPRECIATION	CURRENT VALUE
A- Equipment Regular Program						
Armchairs	383	8.45	3,236.35	12	122.56	118.73
Tables	11	24.00	264.00	15	8.80	13.20
Chairs	9	4.50	40.50	9	.90	.90
Small chairs	19	3.00	57.00	10	3.04	3.04
Cabinets	12	38.50	462.00	10	25.20	25.20
Desks	11	55.20	550.00	15	30.35	20.24
B. Classrooms			4,609.85		190.86	181.31
	5	5,000.00	25,000.00	25	3,724.00	21,276.00
	3	4,000.00	12,000.00	25	11,784.00	216.00
	3	8,000.00	24,000.00	50	7,928.00	16,072.00

B. PROJECT EQUIPMENT	NO. UNITS	UNIT PRICE	TOTAL COST	USABILITY	ANNUAL DEPRECIATION	CURRENT VALUE
Film Projector	2	$600.00	$1,200.00	15-5	$320.00	$480.00
Tape recorders	3	195.00	585.00	15-5	156.00	234.00
Overhead Projector	3	270.00	810.00	6-3	270.00	135.00
Carrousel	3	180.00	498.50	6-3	180.00	90.00
Opaque projector	2	345.00	654.00	15-5	184.00	276.00
Camara Pentax	1	150.00	150.00	3-2	50.00	--
Filmstrip Projector	2	150.00	300.00	15-5	80.00	120.00
Reels	4	.75	3.00	15-5	.80	1.20
Automatic Carrousel	1	44.40	44.40	6-3	14.80	38.00
Projection Table	4	35.95	139.80	15-5	37.28	55.92
Projection Screen	3	51.75	155.25	15-5	41.40	62.10
			11,829.95		1,334.28	1,492.22

III- MATERIALS

A- Regular Program

1. Instructional

Books ---$1,406.71

TITLE	NO. UNITS	UNIT PRICE	TOTAL COST
En el Hogar y en la Escuela	120	$0.62	$74.40
Camino a la Escuela	120	1.40	168.00
Aprendamos a Leer	120	1.61	193.20
Nuestros Amigos	120	1.79	214.80
Del Campo al Pueblo	130	1.88	244.40
Aventuras Maravillosas	25	1.88	47.00
Sorpresas y Maravillas	135	1.33	179.55
Por esos Caminos	174	1.64	285.36
			1,406.71
B. Project Materials			
1. Office			
ITEM			
Magic Marker Red	6 doz.	1.08	6.48
Magic Marker Black	6 doz.	1.08	6.48
Magic Marker Blue	6 doz.	1.08	6.48
Transparent Tape 1/2" x 400	3 doz.	1.44	4.32
Thumbtacks 1/2" head	4 bx.	1.20	4.80
Kraft Envelopes 10" x 14"	10 hd.	1.55	15.50
Kraft Envelopes 9 1/2 x 12"	10 hd.	1.10	11.00
Manilas Folders Letter size 9 1/2 x 11 3/4	15 hd.	.94	14.10
Mimeograph Paper 8 1/2" x 11"	80 rm.	.82	65.60
Mimeograph Paper 8 1/2"x 14"	60 rm.	1.25	75.00
White bristolboard	8 pq.	3.20	25.60
Green bristolboard	5 pq.	2.80	14.00
Mimeograph ink	20 tb.	.75	15.00
Mimeograph ink	26th	1.35	35.10

ITEM	NO. UNITS	UNIT COST	TOTAL COST
Construction Paper	5 pg.	$0.47	$2.35
Construction Paper	5 pg.	$0.47	$2.35
Construction Paper	5 pg.	$0.47	$2.35
Construction Paper	5 pg.	$0.47	$2.35
Construction Paper	5 pg.	$0.47	$2.35
Construction Paper	5 pg.	$0.47	$2.35
Construction Paper	5 pg.	$0.47	$2.35
Construction Paper	5 pg.	$0.47	$2.35
Construction Paper	5 pg.	$0.47	$2.35
Construction Paper	5 pg.	$0.47	$2.35
Stencil paper, blue 8 1/2 x 18"	40 or.	$0.77	30.80
Magic Marker blue	1 doz.	$0.84	$0.84
Magic Marker black	1 doz.	$0.84	$0.84
Magic Marker green	1 doz	$0.84	$0.84
Magic Marker red	2 doz.	$0.84	$0.84
Magic Marker brown	1 doz.	$0.84	$0.84
Magic marker purple	1 doz.	$0.84	$0.84
Magic Marker yellow	1 doz.	$0.84	$0.84
Card index white ruled	15 hd.	$0.20	$3.00
Staple machine	4 ea.	$1.60	$6.40
Staple 1/4" x 1/2"	6 box.	$0.21	$1.26
Paper index 25 1/2 30 1/2	4 pg.	$3.35	$13.40
Mucilage w/spreader	24 bt.	$0.15	$3.60
Colored cellophane tape red	3ro.	$0.46	$1.38
Colored cellophane yellow	3ro.	$0.46	$1.38
Colored cellophane green	3ro.	$0.46	$1.38
Colored cellophane tape blue	3ro.	$0.46	$1.38
Colored pencils	9 bx. small	$0.53	$4.77
Assorted chalk	1 bx. small	$1.50	$1.50
			399.93
Total A / B			$1,806.64

Regular Program

IV- Other student services	1970-1971
a. lunch	$14,800.00
b. transportation	
200 students	800.00
Total	$15,600.00

GENERAL BUDGET: $40,428.00 1971 - 1972.

PERSONNEL	BUDGET	EXPENDITURES	OBLIGATED FUNDS	EXCESS
9 teachers aides	$27,000.00	$18,000.00	$9,000.00	-
1 reading coordinator	$ 2,000.00	915.00	286.50	$ 798.50
1 mathematics coordinator	$ 2,000.00	-	-	$2, 000.00
1 audiovisual coordinator	$ 3,720.00	$ 2,480.00	$1,240.00	-
Miscellaneuos	500.00	490.25	-	9.75
Fringe benefits	$ 5,208.00	$ 3,209.30	$1,578.93	419.77
	$40,428.00	$25,094.85	$12,105.43	$3,228.02

COMPONENTS	NUMBER	PART-TIME	FULL-TIME	REGULAR PROGRAM	TITLE III	OTHERS	TIME WITH PROJECT	COST OF PROJECT
I- PERSONNEL								
A-Instructional personnel								
1. Principal elementary school	1		X	$8,520.00			50%	$4,260.00
2. Elementary teachers 1st. to 3rd	11		X	76,680.00			20%	$15,336.00
3. Teacher aides $250.00 x 12 months c/u	9		X		$27,000.00		100%	$27,000.00
4. Social Worker	1		X	$8,040.00			25%	$2,010.00
5. Others								
Assistant Superintendent	1		5 month		$1,233.33		33 1/3%	$1,233.33
Local Planner	1		X		3,000.00		33 1/3%	$3,000.00
Regional Planner	1		X		3,400.00		33 1/3%	$3,400.00
Audiovisual coordinator	1		X		3,720.00		100%	$3,720.00

COMPONENTS	NUMBER	PART-TIME	FULL-TIME	REGULAR PROGRAM	TITLE III	OTHERS	TIME WITH PROJECT	COST TO PROJECT
Regional supervisor of Spanish	1		X	$8,520.00			6.23/3%	$ 568.0
6 at $585.00								
1 at $610.00								
1 at $635.00								
B- Classified Personnel								
1. Janitor	3		X	$9,540.00			20%	1,908.00
2. Watchman (ADT)						$3,000.00	20%	600.00
C- Additional Services								
1. Reading coordinator	1		X		$1,201.50		30 hours per months	1,201.50
Total A + B				111,300.83	39,554.83			$64,236.83
D-Fringe benefits								
1. Instructional								
Bonus				4,070.40	1,582.19			2,569.47
8.5% Retirement				8,649.60	3,362.16			5,460.13

COMPONENTS	NUMBER	PART-TIME	FULL TIME	REGULAR PROGRAM	TITLE III	OTHERS	TIME WITH PROJECT	COST TO PROJECT
State Insurance fund				$ 1,017.60	$ 395.55			642.37
Social Service (Contracted services 5.2)					62.48			62.48
2. Classified								
Bonus 4%				381.60		120.00		
Retirement 5.5%				524.70		165.00		
Social Security 5.2				496.08		156.00		
State Insurance fund 1%				95.40		30.00		
Total Fringe benefits				$15,235.38	$5,402.38	471.00		$8,734.45
E- Health Services								
$7.00 c/u				1,428.00	928.66	84.00		1,248.26
Total A + B + C + D + E				$127,964.38	$45,885.87	$3,555.00		$74,219.81

II- Equipment	No. of units	Unit Price	Total cost	Usability	Annual Depreciation	Actual value
A. Equipment, regular program						
Arm chairs	383	8.45	3,236.36	12	80.43	38.30
Tables	11	24.00	264.00	15	6.60	6.60
Chairs	9	4.50	40.50	9	-	-
Little chairs	19	3.00	57.00	10	2.09	.95
Cabinets	12	38.50	462.00	10	16.80	8.40
Desks	11	55.20	550.00	15	15.18	15.18
B. Classrooms						
	5	5,000.00	25,000.00	25	5,472.00	19,528.00
	3	4,000.00	12,000.00	25	11,856.00	144.00
	3	8,000.00	24,000.00	50	8,936.00	15,064.00
			65,609.85		26,385.10	34,805.43

Project Equipment	No. of unit	Unit Price	Total cost	Usability	Annual Depreciation	Actual value c/u(71-72)
Film Projector	2	$600.00	$1,200.00	5	$240.00	$240.00
Tape Recorders	3	195.00	585.00	5	117.00	117.00
Overhead Projector	3	270.00	810.00	3	135.00	-
Carrousel	3	180.00	498.00	3	90.00	-
Opaque projector	2	345.00	654.00	5	128.00	128.00
Camara pentax	1	150.00	150.00	2	-	-
Filmstrip Projector	2	150.00	300.00	5	60.00	60.00
Reels	4	.75	3.00	5	0.60	0.60
Automatic Carrousel	1	44.40	44.40	3	7.40	7.40
Projector tables	4	34.95	139.80	5	27.96	27.96
Projector Screens	3	51.75	155.25	5	31.05	31.05
			$11,829.95		$837.01	$612.01

III- MATERIALS

A. Materials	
Regular Program	
I- Instructional	$1,406.71
B. Project Materials	
I- Office	490.25
Totals A ≠ B	$1,896.96

IV- Other student services, 1971-72

Regular Program	
a. Lunch (212 students)	15,688.00
b. Transportation (22 students)	880.00
Total	16,568.00

RESUME-COST ANALYSIS

PROJECT NO. 20

COMPONENTS	TITLE III	REGULAR PROGRAM	OTHERS	TITLE III	REGULAR PROGRAM	OTHER
1. Personnel						
a. Salaries	$38,000.00	$22,054.00	$3,501.00	$39,554.83	$24,782.83	$3,555.00
b. Fringe benefits	4,750.00	2,422.16	-	5,402.38	3,332.07	-
c. Health services	780.00	85.00	-	928.66	319.60	-
2. Equipment	1,492.22	37,745.31	-	612.01	34,805.43	-
3. Materials	1,806.64	-	-	490.25	1,406.71	-
4. Other student services	-	15,600.00	-	-	16,568.00	-
	$46,828.86	77,9[illegible].47	3,501.00	46,988.13	81,214.64	3,555.00

ENROLLMENT: 383

Average cost per student, regular program	203.41
Average cost per student, Title III funds	122.26
Average cost per student, combined funds	325.67
Average cost by funds, allowing for depreciation	182.93

ENROLLMENT: 374

Average cost per student, regular program	$223.09
Average cost per student, Title III funds	125.97
Average cost per student, combined funds	349.06
Average cost by funds, allowing for depreciation	196.71

443

Appendix No. 9

May 10, 1972

MEMORANDUM

TO : Mrs. Carmen R. Díaz de Olano
Director, Spanish Program

FROM : Mrs. Alice Llenza
Nereida Peña de Rodríguez
Delia Díaz de García
Haydeé Díaz de Román
Betty Acosta de Debién
Sonia Dávila de Rodríguez
Annie de Jesús Vda. de Arteaga
General Supervisors of Spanish

RE : EVALUATION OF BOOKLET Mi libro de cuentos, Reading Units , ADAPTATION FROM THE BOOK Del Campo al Pueblo, PAID FOR WITH TITLE III FUNDS

The Spanish Program was instructed by Dr. Angeles Pastor, Undersecretary of Education, to evaluate the booklet Mi Libro de cuentos and make pertinent recommendation and observation. The personnel of the Program have evaluated the booklet and herewith submit their observations:

1. As stated in the booklet, the project to teach reading by learning levels in San Germán has been set up on the basis of diagnostic tests in three levels:

    a. Level 1, using the books for the grade

    b. Level II, using the books for the grade at a slower rate and adding exercises for acquiring fluency

c. Level III, using units called "simple basics" in developing skills, taking these from the basic book, for a period of 50 days in San Germán

In our opinion item "c" is contrary to the policy established by the authors of the Basic Series and to that of the Spanish Program. We recommend material not be abstracted from the Basic Series when using supplementary teaching materials.

2. On analyzing the fundamental concepts used in this booklet, we find some need to be made more precise and clarified in terms of procedures and the focus of instruction:

a. adaptation from book
b. overall method
c. phonetic analysis
d. "simple basics"
e. reading levels (criteria)
f. simplification of skills

As an example of the above, we point out the case of the term "phonetic analysis". We have the impression phonetics is used as a method in itself and not as a key within the overall method, as is recommended. This gives special attention to the meaning, not specifically to the phonemes and to isolated words.

3. A study of the introduction shows the reading levels are set up based on results of seven tests offered in the booklet. As the tests do not have the necessary instructions nor are the purposes of the tests explained, it is hard to determine their effectiveness.

4. From the content and organization of the booklet, it is hard to decide whether it is directed to the teacher or the pupils.

We believe it appropriate to call attention to the fact there is a reading workbook prepared for primary grade pupils coordinated with the textbooks recommended for teaching reading.

5. There are corrections needed in syntax, spelling and in the order of ideas. These have been indicated in the booklet itself.

6. The illustrations should be corrected according to the remarks made on each one.

For the above reasons, the Spanish Program personnel do not recommend the publication of the booklet for distribution nor for any other production that is not completely in agreement with the policy set up under the new Spanish Program.

Much of this vocabulary and many emphasized syllables are presented as elemental within a selection developed on a topic of interest to the child.

Below are some specific observations made on the material in question.

Mi libro de lectura

1. The two exercises on pages 12-13 and 20-21 should be placed at the end of the workbook when the pupil has had enough time to become familiar with the content

2. The exercise on pages 20-21 should make clear what is meant by "that begin the same", since it could mean either the symbol or the syllable.

3. Exercises should be preceded by examples to illustrate the kind of answers.

4. The Table of Contents included syllables that later do not appear in the indicated readings.

a. cu- page 14

b. fu- page 16

c. tu- page 21

d. sa- page 22 (the syllable used is "sal" in the word "salta"

e. che- page 23

f. llo- page 24

5. On page 6 one of the syllables "be" should be dropped

6. On page 23, a localism is used instead of "centavo"

Mi libro de cuentos

1. No permission to make the adaptations of selections from the basic series is shown anywhere and the same is true of the third grade workbook Resume. Care must be taken to protect the copyrights of Laidlaw.

2. On page 1 it states grouping has been done by reading levels. The same is true of Resumes, also. Then certain diagnostic tests are given, which rarely specify the reading skills for which they are testing. What are the criteria for establishing levels?

3. On page 8 pupils are asked to complete a word with small letters m and p, when in some cases capital letters are needed.

4. On pages 9 and 21, what has been provided the pupil so he can answer the second exercises on the pages?

5. On pages 14, 18 and others, the space where the student is to draw should be clearly indicated. The space apparently to be used is extremely small, too small to be recommended for primary pupils.

6. On page 36, does the pupil know what a lotus is?

7. On page 39 the concepts expressed in lines 2 and 5 should be clarified and made precise.

8. On page 41, what phoneme is supposed to complete ___m? The che in small letters does not make a word with meaning and the ll makes a misspelled word.

9. On page 45 the plural of era is given when the pupils are asked to give it.

10 The words on pages 46, 52, 53, 54, and 56 are not taken from any text. They are given in isolation.

B- Grammar

1. We recommend reading the observations made on the first grade workbook Mi libro de lectura.

2. In test I, the word reir should be accented and feliz no.

3. In test 4, the final period in the sixth sentence is omitted.

4. In test 6 (1.9), the exclamation point and punctuation to indicate dialogue are omitted.

5. On page 7 (1.8), a question mark is omitted.

Resumes

This workbook has been prepared much the same as those mentioned above. Therefore we offer only the following comments in order not to repeat.

1. Page 9, what letter is missing in na-io? If it is v, then the i has an accent; if it is c, then the o is accented.

2. Page 14- the date 1943 should be corrected to 1493

3. Page 22-península has an accent

4. Page 23- Cádiz has an accent

5. Page 29- according to the example, the o between aba and aban should be y. There is a big mistake in Item 8 if the pupil answers gobierna (aba) (aban).

6. Page 34- tenía has an accent (1.15) and final period (1.21).

7. Page 36-are pupils prepared to answer the first exercise o
the page? Item 1 is not a phrase, it is a sentence.

Besides the above observations, we believe it important to point out:

1. There is discrepancy between the policy of the Spanish Program for teaching the vernacular and the instructions for use of these workbooks:

a. The Spanish Program does not recommend the so-called "homogeneous organization" based on achievement levels. By establishing the overall method as a policy that requires grouping techniques, this favors the pupils to the degree their special needs can be taken care of without the risk of labeling them more or less intelligent. They are thus treated as individuals within a heterogeneous society and the integrated development of their personality is protected.

b. The Spanish Program does not recommend periods of interruptions in use of the basic series in order to introduce substitute of preparatory materials. How is the pupil going to be interested in reading the same material in the textbook?

1. In a situation like that in the last paragraph of page 1 and the first on page 2 (Mi libro de lectura) there is no doubt that, under normal conditions, the series has not been used properly, which indicates urgent need to give immediate orientation to the teacher on this aspect.

c. The Spanish Program does not recommend isolating some specific skills for exclusive attention and neglecting others of equal importance.

1. The almost total emphasis of these reading workbooks is on recognizing a basic vocabulary and some phonemes. (See Table of Contents) Some skills are passed over lightly and others omitted, so that if not developed along with those emphasized in the workbook, their control will have no meaning.

We believe these reading units and devices accompanying then can be very helpful as long as they are used as supplementary materials at the same time as the pupil uses the basic series textbooks.

We do not recommend use of the workbooks until our recommendations have been followed and the material made to agree with the policy of the Spanish Program for teaching reading.

APPENDIX No. 10

MEMORANDUM

November 13, 1972

TO : Mrs. Carmen R. Díaz de Olano
Director, Spanish Program

FROM : Mrs. Annie de J. de Arteaga
General Supervisor, Spanish

RE : Evaluation of material prepared in the Demonstration District of San Germán as Project No. 20, Title III Law 91-230

Personnel of the Spanish Program, in fulfillment of the assignment to evaluate the material prepared in the Demonstration District of San Germán under Project No. 20, Title III, Law 91-230, have studied carefully its content and objectives.

The material includes the following:

1. Mi libro de lectura - reading workbook for first grade
2. Mi libro de cuentos- reading workbook for second grade
3. Resumes- reading workbook for third grade
4. Teaching devices- to assure control of various skills

The preparation of these materials does not follow the content of the basic series in topics nor vocabulary. The workbooks contain some reading units prepared by teachers of these grades and the reading coordinator of the district. Basic vocabulary is included in these units and emphasis is given to some syllables that are not always found in that vocabulary but that have phonemes that are given as basic in the manual of the basic series.

VALIDATION

Center for Learning Resources
Project # 23
Santa Isabel

The Validation Team for Project No. 23, known as "Center for Learning Resources," was composed of the following persons:

Isabel Santiago López

Carmen H, Díaz de Emmanuelli

Jenny Montes de Laó

Patria E. Torres

Gloria Figueroa de Guevara

Eloína Colondres de Durán

I- Descrition of Project

A. Title : The Library-Center for Learning Resources

B. Introduction :

After a series of visits and interviews with students, teachers, vocational counselor, principal and librarian-teacher in the John F. Kennedy Senior High School, located in the urban zone of the Santa Isabel School District, we could verify that the facilities of the library in this school need improvements, as it does not offer chance for developing to the maximum the aptitude for learning of 75% of itsstudents,

The library of the school provides services to an enrollment of 610 students, 27 high school teachers and a vocational counselor. The school has 18 classrooms, a school lunchroom, two offices, one office for the principal and another for the vocational counselor, and a storeroom.

Basing our findings on comments by teachers, students, the principal and the vocational counselor and on surveys, we learned the factors preventing maximum development of 75% of the students are:

1. The number of books in the library is not enough to take care of the needs of the enrollment:

3,416 books

610 students

2. The books in the library are not up to date and do not have information in any of the subjects on recent developments.
3. The section on History of Puerto Rico has nothing
4. The library dictionary is incomplete
5. The small space limits the number of students who can use it and the facilities in it.
6. Four teachers use library facilities regularly.
7. 18 teachers find the library books do not give them information to broaden their knowledge of their fields and must limit themselves to the class textbooks.
8. 10 teachers would like to practice new techniques of team teaching with the librarian and independent study with pupils, but the library does not have the facilities such as audiovisual means.
9. Students cannot increase their experiences through independent, individual study in social studies and history because the library does not have maps, magazines and /or books for enrichment in these fields.

10. The English teachers and many students in the English classes complain they both do not have equipment for practice as in a language laboratory.

Clientele:

The Center for Learning Resources affects directly 610 students in the John F. Kennedy Senior High School:

10 th grade	247
11 th grade	201
12 th grade	162
Total	610

27 teachers and one vocational counselor

Indirectly, the Center for Learning Resources affects 786 students from the Manuel M. Monserrate Junior High School, 25 teachers from that school and one vocational counselor.

Budget:

A. Personnel

1. Instructional

a) paid with state funds

1 librarian	$ 445.00

b) paid with Title III funds

1 TV technician I

1 coordinator of teaching programs

B. Physical facilities:

1. equipment

a) on hand - The library of the John F. Kennedy Senior High school has

6 tables
42 chairs
1 open file
1 desk
1 chair
2 magazine racks
1 file cabinet
2 globes
1 lectern
1 guillotine
1 typewriter
Wooden booths

b) The John F. Kennedy Senior High School library needs the following equipment inorder to carry out the project: The Library-Center For Learning Resources

8 monitors, 9-inch
4 tape recorders
4 record players

2 Dukane Filmstrip Projectors

2 Carrousel Slide Projectors, Kodak

2 Projectors Super 8mm

26 earphones (Telex)

24 booths

1 mimeograph

1 mini-graph catalog card duplicator

1 audiovisual storage equipment

1 record browser guide

2 distributors

2 airconditioners

1 photocopy machine

12 TV (SC)

2 Materials

a) on hand

The library has the following materials

3,416 books

11 magazines

b) to be supplied with Title III funds

The library needs the following materials in order to carry out the plan proposed for it as a Center for Learning Resources:

50 records in the different subjects, but especially-

- a) music
    - 1. the great classics
    - 2. folklore music
- b) English
    - 1. language exercises
    - 2. poems
    - 3. songs
    - 4. stories
- c) s6cial studies
    - 1. national hymns
    - 2. famous speeches
- d) vocational counseling
- e) health
- f) physical education
- g) Spanish

69 tapes

100 filmstrips

20 diapositive series

20 transparencies series

30 8mm films (cartridge)

Note: These materials will be used in the different subjects as they are needed. Teachers and students will also produce some materials according to available facilities and their interests:

2 series of maps

1. Europe
2. United States
3. Puerto Rico
4. Latin America

2 globes

15 boxes of photocopy materials

Miscellaneous educational materials (pictures, cards, forms)

3. Buildings

a) Remodeling

The room where the library is now located is 24' by 34' and needs to be enlarged. A door into the adjoining room will be opened, which will allow more students to use the library. (The industrial arts teacher and his pupils will do the remodeling).

b) Construction

1 classroom, 24' by 34', prefabricated will be built for the teacher now using the room next to the library,

which is to be used to extend the latter.

(The classroom will be built by Public Works).

II. Project objectives

This Center for Learning Resources expects to:

A. General objectives

1. Convert the John F. Kennedy Senior High School library into a Center for Learning Resources in order to improve the quality of teaching through the use of audiovisual means.

2. Provide students an opportunity to develop their creative and intellectual capacities through different techniques of individual, independent study and learning.

B. Specific objectives

This Center proposes to achieve the following:

1. Complement and enrich by at least 80% individual, independent study in the library through use of the following audiovisual equipment with modern technology:

a) monitors

b) tape recorders

c) record players

d) filmstrip projectors

e) carrousel projectors

f) super 8mm technicolor projectors

2. Enrich by 85% the content of materials studied in the different subjects in terms of needs and interests of the students.

3. Encourage initiative of students to learn individually and independently through enrichment activities.

4. Develop a training program and team work by which teachers, the librarian and students succeed in effectively preparing tasks and using facilities of the Center.

5. Offer adequate space and favorable atmosphere for teachers and students to study, look for information, do research, do leisure reading.

III- Procedures used for validation

The following meetings were held :

October 20, 1972	Validation team of Central Office
October 26, 1972	Validation team, Title III, Technological Institute
November 9, 1972	Validation team, Public Library, to complete plans for visiting Santa Isabel, using Mrs. Goglas as resource
November 27, 1972	
November 28, 1972	

November 30, 1972	(See Region Sur Memo)
December 5, 1972	Public Library, Ponce, to begin preparation of report
December 15, 1972	To continue preparation of report
January 9, 1973	To finish report

A. Strategies used

1. Techniques and methods used to gather evidence
    - a) Group interviews with district administrative personnel
    - b) Group interviews with parents and citizens
    - c) Analysis of documents and materials
    - d) Visit to Center of Learning Resources
    - e) Observe use of equipment
    - f) Personal interviews with the library coordinator and the English supervisor working in the Project
    - g) Group interview with students using the projective technique of completing sentences
    - h) Group interview with teachers
2. Documents examined:
    - a) Unit plans for preparing research work

      Unit : Expressions of Puerto Rican Thought

      Work: Tun Tun de pasa y grifería by Luis Palés Matos Spanish 11

La Charca

Development of the realistic novel in Puerto Rico

Life and work of Don Quijote

b) Four unit plans in science: written compositions, free topics from which students selected, related to chemistry or biology; option topics in chemistry and biology to determine whether a substance is acid or basic.

c) General history

Open topic: Struggle for democracy and national union
The industrial revolution and imperialism
From the first to the second World War
Our times

d) Puerto Rican history

Open topic.

For this research work the library has a special from:

Teacher Date

Subject Group

Deadline for work

Topic

Bibliography

3. Weekly plans of the project coordinator from remodeling of the library, January 18, 1971, to May 1972

4. Attendance records of teachers

The statistics do not agree with the opinions expressed by the coordinator and school principal. Attendance records show the English teachers use the Center of Learning Resources most, while the coordinator and principal say it is the Spanish teachers. It was impossible to prove what they said. In a group interview, however, the conlusion was that it is science teachers.

5. Regional evaluation

This gave us a standard for comparison with the provious year. Very good.

6. Training

a) Four training sessions were given by the Buchanan Center to nine persons in television techniques. Trainning sessions in preparing scripts were planned and given by the project coordinator. There is no evidence this training produced the multiple benefits expected.

7. Attendance of teachers and others

Statistics show an average attendance of 12.2 persons each activity. However, these are not reliable as they are taken from different records, which do not agree on the information, nor do they agree with opinions expressed in interviews nor with evidence on tapes.

8. Photo album

Although the album is incomplete, it was possible to observe a variety of activities and the satisfed expressions of the people in the pictures. Many pictures were candid photographs, taken without warning.

9. Participants in library activities

Records show 12 different activities with an average of 12.2 persons in each. However, interviews and an examination of materials produced brought out facts of other activities that are not in the records, which makes these unreliable. Most of the activities were in the area of Spanish.

10. Lists of groups going to the library

There are lists of groups programmed for 50 minute periods, five groups from 10th grade with 178 students and five from 11th with 139 students. Teacher and pupil interviews revealed these periods were unknown to the majority of faculty and students. The latter said most of them do not go because they believe it is required.

11. Research work prepared in independent study

Area	No. of research projects
Health	8
Sociology	1
Spanish	22
History	1

Area	No. of research projects
Sciences	5
Library	1
Total	38

38 research projects were listed and 38 students engaged in independent study, but the projects, except in one case, do not correspond to the names of the students listed. Topics were assigned previously and are related to course content. No difference could be seen between research under independent study and that regularly assigned.

12. Center of Educational Resources Services

We could observe a great variety of services requested from the Center for Educational Resources: bulbs, feltgraphs, pictures, projectors, diapositives, brochures, training, etc. This can be considered as an index of the variety of activities.

13. An illustrated project history shows its development at various stages. There is a before-effect of the physical condition of the room prepared for the Center of Learning Resources. A radical change is seen in so far as the physical facilities.

14. Transparencies from enlarged pictures

There are two sets of transparencies made by students. They have been used in classrooms and for individual reports. They were also used as devices with taped lessons and for Spanish 11 units. Instructions on preparing transparencies were given students in training sessions by the project coordinator.

The enlarged pictures for use with the opaque projector were on the topic of Drug Addiction and were used in health and social study classes.

15. Student attendance

In every case for all months attendance is duplicated. (See Apendix I)

16. Book circulation by months (See Appendix II)

This is very general, in terms of fiction or nonfiction. The yearly average was eight books per students, or less than one book a month read by the students. As compared with circulation the previous year, there is no significant increase since the average then was four books the six months reported. We believe it should be pointed out that the inventory of books for 1970-71 and 1971-72 shows an increase of 770 books for the two years. This seems to us a very small amount for a project such as this, especially if the situation described originally in the proposal stressed the imperative need to supply reading books and reference books such as Historia de Puerto Rico, etc. Interviews with teachers and students confirmed this information.

17. Services offered by the Center of Educational Resources (See Apendix III)

A significant increase could be noted in the clientele who benefited but not in the times service was provided. In some items there was no increase, while in others there was a decrease and in no case was there significant increase in services.

18. The table shows a marked preference for records, and for use of transparencies and film strips, as the project has not supplied them. We believe the production of audio and video tapes is not up to what it should be according to the facilities acquired and the training received.

19. Purposes of students by grades (See AppendixIV)

In general terms, students go mostly to study and prepare assignments. Lowest attendance is from 11th grade. As was to be expected, months with poorest attendance are August, December and May; highest attendance was October.

20. Signatures of visitors to Project No. 23

During 1971-72 there were 93 visitors to the project, with the following objectives:

11 for work on the physical facilities

12 to supervise the project

6 to observe

5 for analysis

3 for lectures

1 to take pictures

3 for coordination

5 to study (students from Catholic University, University of Puerto Rico)

3 for followup

21. Bulletins prepared for dissemination (See Appendix V)

1. Ponce Educational Region-Title III	1
2. Analysis of Proposal and Plan of work (professional meeting)	1
3. Library Week (April 19-23) (1971)	1
4. Education Week, Exhibit of Title III Projects	1
5. Christmas greetings, Project 23	1
6. Library Week (April 17-21, 1972) (Activites for observance of this)	
7. Remodeling and expansion plans for project 23	1
8. How to Study, orientation	1

We were told there have been more dissemination activities but no bulletins have been kept as evidence.

22. Inventory of property of Title III(Appendix VI)

23. Local production

Videotapes	28
local	11
copied	17
Spanish	
local	3
copied	8
tapes	7
Spanish	
a. local	3
b. retaped	8
c. tapes	7
Chemistry	3
Sociology	8
History	3
Music	7
Orientation	5
Health	1
Audiovisual	1

24. Films

Films have been borrowed from the Buchanan Center and from the Ponce Regional Audiovisual Center.

Filmstrips have been purchased and also borrowed from the buchanan Center

25. Diapositives

There are enough. Also, these are borrowed from the Buchanan Center.

IV- Cost-analysis and benefits

For lack of sufficient data to judge, we refrain from expressing any opinion on this item .

Appendix 3

VALIDATION PROCESS

Check Sheet

Title : Center for Learning Resources

District : Santa Isabel **Date:** January 9, 1972

I. Indicate by a check mark in the proper column your rating of each area according to the scale:

0- Nothing at all

1- Unsatisfactory

2- Satisfactory

3- Outstanding

4- Excellent

AREAS	0	1	2	3	4
1. The strategies used in the project contribute to solve problem(s) identified in the study of needs				X	
2. The project presents evidence to show the operational objectives were effectively reached			X		
3. The project presents evidence to show the instruments used provide objective and realiable information		X			
4. The project presentes an analysis of cost-effectiveness that reflects a relationship between the costs and the performance of participants		X			
5. Analysis of cost-effectiveness indicates the project is practical (The money spent is justified by the product)		X			

AREAS	0	1	2	3	4
6. The project can be observed both visually and communicably					X
7. The project has concept or practices obviously original, unusual and exemplary					X
8. The project offers innovative procedures, techniques and practices that can be disseminated				X	
9. The project has made a significant contribution to the educational system				X	

II. Explain your rating

VII. Recommendation and General conclusions

1. Unit Plans

We consider there are very few units plans for all the school year. The only science teacher who seems to have materials and to be using the Center materials is that of chemistry and biology.

2. The coordinator is very responsible, well organized and a good worker. She had clear, well defined plans.
3. It was impossible to determine with any certainty which teacher of what subjects were making most use of the Center for Learning Resources, as there was insufficient evidence. From all the interviews it was deduced the Spanish teachers went most often to the Center, but this could not be proved. From group interviews, we concluded science teachers went most often.
4. Regional validation was well done and offered a basis for comparison.
5. Teacher training reached a very limited number, nine only.
6. According to the opinion of those interviewed, there seems to have been increased participation in library activities, but there was no evidence to confirm this.
7. The photographic sequence shown us showed a variety of activities and variety in student participation.
8. The concept of Center for Learning Resources does not seem to be understood as described in the proposal. It is always referred to as the library and this is the name on the door.

9. The evidence presented is incomplete. Intensive participation by faculty is claimed but there is no documentation to back this up. The teachers should sign in .

10. Apparently, obligatory periods are not well accepted by the students. They have served, however, to increase the average attendance at the library. There is no evidence available to indicate these periods have been used properly. We believe it should be noted that compulsory library periods is precisely the reason for not accepting them, as attendance should be voluntary. If the Center were interpreted correctly, the students should go on their own.

11. What is termed independent study in this project is a very simplified interpretation of the idea. We believe special efforts should be made to compare the results of this type of work with that done normally in the classroom.

12. Evidence presented on requests for service makes us conclude there has been a variety in the activities planned in the district. Of course, Project 23 functioned for one semester with loans from the CRE.

13. There is evidence of a splendid change in the facilities of the physical plant.

14. The quality of transparencies and illustrations shows the effectiveness of the training received. It seems to us, however, this aspect has not been used as much as it should have been, from which we conclude

this knowledge has not been exploited to the full .

15.. An increase in attendance at the library can be seen but not to the extent that a center of this broad concept should have.

16. There has been an increase of book circulation but not significantly if it is compared with records from regular libraries without the facilities of the Center.

17. It is interesting to indicate that in a Resource Center like this the objectives of students are the same as those of students in any other regular library. It was expected the demand for services proper to a Center of Resources would be much greater. There is no reason for sacrificing the 10th grade block, the very ones who are to be in the school for three years.

18. It is impossible to conclude there has been a marked increase in all types of services offered, since there has been a decrease in some, even though the clientele has increased.

19. It seems to us the visitors register of the project is incomplete. If this is not the case, then attendance at the project has been very limited. Consequently, all visitors should be required to sign.

20. We believe there should be more bulletins for dissemination. Evidence presented indicates there has not been systematic and continuous publicity as expected.

21. We find enough equipment has been bought with the funds assigned under the proposal for the project to function .

Nothing has been bought in addition and the personnel thinks there is no assignment of funds for purchase of more material.

22. Although we recognize there have been problems with the project, we believe there has been very little local production. We urge more local production.

23/24. Films and diapositives have been the most attractive and have been used by the greatest number of persons.

Resume

We conclude the project can be converted into a model Center of Learning Resources and can very well be adapted in other districts and over the Island.

We recognize it has faced innumerable problems of frequent changes in personnel, from remodeling and purchase procedures that have adversely affected it, but it can go forward if there is enthusiasm and if the faculty, students and resources are more involved and if the program of activities is planned as it appears in the proposal.

A proposal for renewal and continuation of the project can be made, which will give a new chance for a broader development.

WORK SCHEDULE

November 27	November 28	November 30
A. M. Session 8:30 Meeting of the following personnel: School superintendent Assistant superintendent Planner Principal Librarian Coordinator Topics 1. Clear up questions on achievements report 2. Questionnaire on the guidelines 3. General discussion about the project 10:00-Meeting with representatives of: 1. Parents of regular students Citizens 3. Civic institutions 4. Government institutions 5. University students making use of Center services 6. Graduates who have benefited from the project P.M. -Session 1:00 Meeting with first group to ask for evidence for identifying achievements and general information on the project.	A.M. and P.M. Sessions 1. Analyze information given to support achievements Mrs. Guevara Mrs. Montes 2. Revision of plans Mrs. Santiago Mrs. Torres 3. Interviews with Carmen J, Martínez and Mrs. Benítez (A.M.) 4. Observation and check on production and use of other materials and technological equipment	A.M. Sessions 8:30- Group interview of a sample of studen by: Mrs. B. Goglas, chairman Notes by: Mrs. Emmanuelli Mrs. Guevara Mrs. Santiago Observations on reactions and attitudes Mrs. Torres Mrs. Montes P.M. Session 1:00 - Group interview of teachers in the school Mrs. B. Goglas, chairman Notes by: Mrs. Montes Mrs. Torres Observations on reactions and attitudes by- Mrs. Guevara Mrs. Santiago Mrs. Emmanuelli Costs analysis Team work

Appendix 1

Comparision of Daily attendance by students to the library by month, 1970-71 and 1971-72

Month	1970-1971			1971-1972			Increase in average over previous year
	Total	Days	Average	Total	Days	Average	
August	*	*	*	1,365	20	68.25	+
September	*	*	*	1,657	19	86.90	+
October	*	*	*	2,134	19	112.31	+
November	*	*	*	1,724	18	69.77	+
December	*	*	*	1,196	18	66.44	+
January	*	*	*	1,233	18	68.00	+
February	936	19	49.26	1,921	18	106.07	56.81
March	927	19	48.78	1,540	14	90.60	41.82
April	533	14	39.50	1,538	17	89.47	49.97
May	586	15	38.42	790	9	56.42	18.00
Total	3,002	67	44.80	15,116	170	88.91	

*No record

+ No comparison possible for lack of previous year's records

Appendix 2

Circulation of Fiction for two consecutive years

Month	1970-1971	1971-1972	Total
August	*	22	22
September	*	91	91
October	*	49	49
November	*	57	57
December	*	16	16
January	41	100	141
February	62	26	88
March	39	16	55
April	47	63	110
May	57	10	67
TOTAL	246	450	696

* No record kept.

Resume of Circulation for two consecutive years

Month	Fiction	Non-Fiction	Total
August	22	734	756
September	91	743	834
October	49	767	816
November	57	489	546
December	16	223	239
January	141	1,038	1,179
February	88	1,264	1,352
March	55	1,808	1,863
April	110	1,214	1,324
May	67	190	257
Total	696	8,470	9,166

Appendix 3

Services Provided in the Resources Center

Equipment used	Times used		Students Benefited	
Projectors	1970-71	1971-72	1970-71	1971-72
8mm	7	10	50	257
16 mm	15	47	547	1921
Vertical	10	42	242	251
Opaque	6	6	27	152
Carrousel	19	31	57	401
Projection services	41	185	811	4120
Record player	25	45	154	1142
Tape recorder	13	21	347	682
Video tape recorders	9	31	452	1522
Film strip	26	105	436	2433
Films 16 mm	25	76	547	1921
Films 8 mm	7	42	50	257
Transparencies	67	430	242	702
Diapositives	65	31	57	502
Records	146	1142	154	280
Tapes	7	10	347	-
Video tapes	6	15	452	450
Filmstrip	25	40	436	2145
Translation of filmstrips	5	2	36	101
Evaluation of :				
Films	5	32	29	67
Tapes	6	7	80	405
Videotapes	-	5	-	324

Appendix 4

Project # 23
Distribution of Clientele by Grade and Objective, 1971-72

Table II

Month		Study	Assign-ment	Read	Observe	Discuss resume	Look for book	Visit	Return book	Write	Class	Use equip ment	Re new book	Infor mation	Meeting	Listen to Music	See film	See TV	TOTALS 10	11	12	NC
August	10	184	268	29	3		16	3	4		8								515			29
	11	139	236	105	7		43	3	4											537		
	12	57	163	29	11	2	4	1													268	
	0	2	19	4				1											26			
September	10	177	173	76	3		20	1	10	7	17	12							496			
	11	231	283	61	6		17		6	3	46	43	4								700	47
	12	108	219	18	17		11			6		2									381	
	0	2	6	2															10			
October	10	336	210	69	46		5			7	5	69		18	9	42			816			
	11	332	223	89	11		28	3	5	1	21	107		9	1	11				481		52
	12	166	92	59	21		4	3				4		3		3					355	
	0	10	4											5					19			
November	10	203	232	57	3		2	1	1	2	7	116		4			11		639			
	11	293	207	50	1		9	4	6	2	13	88	10	3	1	66				753		35
	12	87	128	28	1		2	1				14					2				264	

ontinuation 2

Month	Study		Assignment	Read	Observe	Discuss resume	Look for book	Visit	Return book	Write	Class	Use equipment	Renew book	Information	Meeting	Listen to Music	See film	See TV	10	11	12	N.C.
November	0	2	1	8			2	1		1		1		1			2		16			
mber	10	208	114	40	3		1	1		3		52		4			43		469			
	11	223	118	22			6	1	3		1	53		1			40			468		21
	12	60	104	11	9			2		2		1		4		1	28				222	
	0	2	2	5				1											10			
January	10	295	189	30	5		44		9	5	21	38		13	2	1	18		670			
	11	287	195	81	2		19	9	2	4	6	32		11		6				654		29
	12	124	108	19	3		4			1	1	1		19	3	2	13				298	
	0	5	4	2															11			
	10	298	287	41	10		4	1	1	5	15	6		9		14	1	2	674			50
F uary	11	377	249	67	12			8		3	15	42		2		6	7	2		790		
	12	157	134	36	6					2	3			2		4	3				347	
	0	4	2	2	1					2				4					15			
March	10	407	155	43	8		1	2	1	3				4	1		2	4	613			1
	11	306	160	45			2	6		2	21	2		3						547		

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Continuation 3

Month	Study		Assignment	Read	Observe	Discuss resume	Look for book	Visit	Return book	Write	Class	Use equipment	Renew book	Information	Meeting	Listen to Music	See film	See TV	TOTALS			
																			10	11	12	N. C.
March	12	131	130	32	2			1		2	6			3				2			309	
	0	16	1	2									1	1					20			
April	10	377	125	76	14		2	4		6		6		6	4	10	8		638			15
	11	314	119	51	14		2		2	9					2	6		2		521		
	12	132	103	55	17					4				4	4	2	4				325	
	0	12	5	5				4									1		27			
May	10	221	64	24	15			15		1				3					343			
	11	167	45	23	1			2	2	1				1						242		
	12	64	37	17	2		1			1							2				124	46
	0	19	2	2	15												5		41			

N. C. Not counted, includes those students who give no grade.

Φ Other

NOTA: Students who give no grade go to the library for various reasons.
This explains the reason for the objective and the other total number
of students with objective and the other table of objectives by grades.

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Appendix 6

INVENTORY OF PROPERTY RECEIVED UNDER TITLE III ,LAW 91-230

Project : #23 The Library : Center of Learning Resources

Date: September 13-22, 1972

No.	Description	Brand	Model	Property Number	Person who revised it	New inventory-Date	Observations
1	Vertical Projector	Graflex		0000058			
2	Gray Table			0000367			
3	7-drawer file	Jebco Quality		0000658			
4	Opaqueprojector	Projector Optics	20005	0001029			
5	Projector Super 8	Technicolor	810	0001031			
6	Projector Super 8	Technicolor	810	0001032			
7	Opaque Projector	Projector Optics	20005	0001052			
8	20- Booths			0001339			
	"			of the 0001355			
	"			to the 0001357			
	"			of the 0001366			
	"			to the 0001368			
-	"			0001372 0001377			
				0001381 0001388			

No.	Description	Brand	Model	Property Number	Person who revised it	New inventory-Date	Observations
9	Typewriter Table			0002039			
10	Screen	Bodiart					
11	2 Air conditioners	Fedders		0004180 0004181			
12	Tape recorder	Wollensak	3000	0004188			
13	Mimeograph	Gestetner	320	0004634			
14	2 Carrousel Slide Projector	Kodak	E	0004685 0004686			
15	Zoom Lens	Cosmicar	Z 6618	0004719			
16	Copy Machine	Thermofax	45 CG	0004782			
17	Filmstrip projector with sound	Viewlex		0004797			
18	2 Projector sound Viewer	Technicolor	1300	0004846 0004847			
19	4 Record player	Audiotronics		0004850 0004853			
20	2 Projector Karlat	Victor		0004877 0004878			
21	5-drawer file			0004895			
22	Executive chair, yellow			0004896			
23	Executive desk, gray			0004898			
24	Cabinet, gray			0004900			
25	2-Transmilters	Dyasir	TX 4A	0004912			
26	Camara kit	Ampez	CC 6400	0004917			

No.	Description	Brand	Model	Property Number	Person who revised it	New inventory Date	Observations
27	Monitor	Ampex		0004918			
28	Video Tape Record Player(2)	Ampex	VTR 7000	0004921 0004919			
29	Dry Mounting and laminating	Commercial	200	5099			
30	Record Browser Units	Gag Lord		5112			
31	Executive desk, gray			5171			
32	Gine sound 16 mm	Viewlex		5416			
33	4-Tape recorders	Telefurlher	Magnetophon	0006560 0006563			
34	2-Cassette recorders	Gmig		0006723 0006724			
35	2- Rear Seven Filmstrip Projector	Beucon	FS 150	0006725 0006729			
36	Opaque Projector	Besele	W-L XTE-111	0006730			
37	Wall Screen	2		0006751			
38	2 Super 9 Film Leop Player	Technicolor		0006770 0006771			
39	Filmstrip projector	Gonfler	226-2496				
40	5-Carrousel Slide Tray	Kodak					
41	Tape recoider	Wollensak	152 VA				
42	2-Microphone	Share	533-SA-ma 8				
43	2-Tape recorder	Co-corb	Tron tanzd 220				
44	Cabinet Brown	Lucor					

No.	Description	Brand	Model	Property Number	Person who revised it	New inventory Date	Observations
45	Book press	Gog Lord					
46	Book craft kit	Gog Lord					
47	Metal Book truck	Gog Lord		0005111			
48	Plastic letters pn back	Gog lord					
49	3-Metal book displayer						
50	Record Display Browser						
51	Audiophones						
52	Current extensions						
53	Audiophone extensions						
54	Arm chair, yellow						
55	5-Carrousel slide tray						
56	Case for audiophones, black						
57	8-Televisors with stand			0006212 0006219			
58	4-Televisors	Setchell Carlson		0005840 0005843			
[illegible]9	T-square 36"						
60	Reflector bulbs						
61	Electro Pencil	Goy Lord					
62	Screen, green						

No.	Description	Brand	Model	Property Number	Person who revised it	New inventory Date	Observations
63	Quartz lamp set	Smith Victor Corp.					
64	Books racks box						
65	New resource Center cabinet	Enciclopedia Britanica	19050	6926			
66	Projector vertical with 10"x10" projector area 10"x10" (2)	3M		0006847 0006848			
67	Projector vertical 400 watts	3M		0006846			
68	2-Rock Mount papel for D.A.			0006850 0006851			
69	2-D A 3 ec video D A			0006852 0006853			
70	2 A D 280 Audio Preamp 600 Ohms out put			0006854 0006855			
71	Projector "Film strip Examiners"		999	6908			
72	Standard table, movable for projector			6909			
73	2 screens, wall type			6910 6911			
74	Dictaphones (8)			0003942 0003829			
	"			0003956 0003882			
	"			0003872 0003995			
	"			0003878 0003958			
75	4- Multi Outlets boxes PHB Audiotronics						

Project #23

Distribution of Clientele by Objective 1971-72

Month	Study	Assignment	Read	Observe	Discuss book	Get books	Visit	Return book	Write	Class	Team work	Renew book	Information	Meeting	Listen Music	See film	See TV	Total
August	395	693	174	21	2	63	10	8	1	8								1,375
September	543	693	159	30		48	1	16		16	58	4						1,634
October	891	530	220	79		37	6		8	26	180		35	10	56			2,083
November	615	572	144	5		15	6	7	5	20	206		29	3	1	79		1,707
December	510	340	78				5	3	5	1	106		10		1	111		1,190
January	735	500	132	10		68	9	11	10	28	71		43	5	9	31		1,662
February	875	652	155	29		4	9	1	12	33	48		17		24	12	5	1,876
March	883	447	122	10		3	10	1	7	28	2	1	11			2	6	1,533
April	898	360	150	45		4	8	2	19		2		10	11	18	13	2	1,586
May	508	154	79	18		1	20	2	3				4			7		796

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF EDUCATION
ARECIBO EDUCATIONAL REGION

VALIDATION REPORT
PROJECT #26

Proposal for a Music Room in the Juan Ríos Serpa Senior High School
Ciales Demonstration District

Title III, Law 91-230

Submitted by the Validation Committee:

1. Iris N. Jiménez
2. Alicia Iguina Monrouzeau
3. Leticia Sillart de Mieles
4. José S. Otero

Cooperating with the Committee:

1. Héctor Vega Druet
2. María Teresa Mercado

January 19, 1973
Arecibo Educational Region

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III. Achievements to be verified

IV. Procedures used in the validation process

  A. Techniques and methods for gathering evidence

  B. Documents examined

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VI. Cost analysis

VII. Recommendations and general conclusions

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I. Description

The Music Room of the Juan Ríos Serpa Senior High School of Ciales is a project aimed at discovering musical talent in the students. The room also provides a place where they can make better use of their free time through listening to and appreciating good music.

The Music Room is equipped with a modern stereophonic system with four listening channels. Each student has a chance to listen to his favorite program through the choice of channels. One teacher and five assistants are in charge of the Room during the day.

In one part of the room classes in piano and guitar are offered students interested in developing these artistic talents.

II. Objectives

At the end of this project, we expect to have

- significantly increased the cultural-musical knowledge of the students in:
  - a. Puerto Rican music
  - b. International music
- established good, effective coordination between the Music Room activities and other areas of the school curriculum
- discovered special musical talent and provided for possible local development, through governmental and other institutional resources and help.
- programmed and carried out musical recreational activities for the benefit or enjoyment of the Ciales community

- provided the senior high student body with facilities for spiritual growth by listening to and appreciating good music.
- programmed and carried out cultural activities through the joint effort of the Music Room, the Cultural Center of Ciales, the Puerto Rico Institute of Culture, the Puerto Rico Conservatory of Music, the University of Puerto Rico and other organizations or cultural institutions of Puerto Rico.
- succeeded in getting a reasonable number of senior high students to learn to play musical instruments, especially piano.

III. Achievements to be verified

1. Instruction of musical instruments (piano and guitar)
2. More effective use of free time by the students
3. Significant changes in conduct by the clientele as a direct result of the project.

IV. Procedure used in the validation process

A. Techniques and methods used to gather evidence

October 20, 1972,the Validation Committee selected at regional level received orientation from personnel of the Division of Evaluation and Educational Development on the validation process to be performed in the Ciales Demonstration District.

1. The following techniques were used by the committee:
   a. study and analyze the guidelines received by the Division of Evaluation and Educational Development
   b. study Proposal #26

        c. outline a plan of action
        d. get opinions of district personnel and to
            1. explain purpose and procedures of the validation
            2. clarify and get precise information about achievements
            3. exchange basic information about the project

2. Visits to:

   Juan Ríos Serpa Urban Senior High School

3. Interviews with:
    a. students
    b. school principals
    c. superintendent of schools
    d. director, Title III projects
    e. guitar instructors
    f. piano teacher
    g. teacher in charge of Music Room
    h. regional planner
    i. local planner
    j. vocational counselor
    k. academic teachers

4. Questionnaires to students

5. Observations of:

   a. Music Room in action
   b. work of student guitar instructors
   c. piano class
   d. students performing what they had learned on the different instruments

B. Documents examined

1. Proposal #26
2. Attendance records by grade and sex of students at the Music Room:
   a. daily
   b. monthly
   c. semester
3. Interviews by the school principal with a group of students from each grade
4. Functioning of Music Room
5. Students enrolled in the piano classes
6. Report of guitar and mandolin instructors for 1970-71
7. Service contracts
8. Orientation of faculty about the project
9. Signatures of visitors to the Music Room
10. Membership in the Music Club
11. Students in the Typical Music Group
12. Daily attendance sheets for work of aides and instructors
13. Record of activities carried out in cooperation with the Music Room
14. Monthly reports on activities in the Music Room
15. Cost-analysis report

V. Result of the validation

The Validation Committee studied the performance of the Music Room in the senior high school. It is one means the school provides for beneficial use of free time by the students. The room has contributed to a cultural enrichment of the students and has developed talent and musical ability.

Through school visits, questionnaires, study of data offered and other means, we determined changes in behavior were effected in the students as a result of the Music Room in its initial stage. The following data are evidence of this fact:

1. A questionnaire given January 17, 1973, to a random sample of 110 students from 10th, 11th and 12th grades in the Juan Ríos Serpa High School to gather evidence on achievements claimed by the school district, revealed:

   1. 95% of students answering the questionnaire say the Music Room is their preferred activity for free time use.
   2. the average daily attendance at the Music Room in September was 144 students, evidence that the room is visited by a high number of students at least once or more times each month.
   3. more than 50% of the Juan Ríos Serpa School students have taken part in activities connected with the Music Room, both in the school and in the community.
   4. a change in positive attitudes by Juan Ríos Serpa Senior High students has begun to take place, the result in part of Music Room activities. This fact could be observed in interviews and in data from the questionnaire. (See the questionnaire and direct quotes from students, Appendices I-A and I-B)

5. many types of interests were observed in the activities of the Music Room, which has served to motivate students to carry out activities to improve the room. (See comments by students)

B. Through documents examined and direct observations in validation visits, the following were noted:

1. 22 students have been taking piano classes during 1971-72 in their free time and are continuing so far this year. (See student enrollment in music classes, Appendix I-C)

2. 17 students have taken guitar classes with three instructors (students in the same school) in 1971-72 and are continuing this year. (See Appendix I- D)

3. piano and guitar students can play some simple pieces. (A sample of four piano and five guitar students was selected)

C. The Music Room has contributed to a more effective use of free time by the students, as it has provided a pleasant place to satisfy their need for a good time in company of others having similar interests. (See Appendix I-E)

VI. Cost Analysis (See Appendix I-F)

VII. Recommendations and conclusions:

The Validation Committee recommends the following for better performance of the Music Room:

a. better cooperation and coordination of the Music Room with the academic subjects in the school.

b. more time be made available for piano and guitar classes so more students can have at least a weekly class.

c. guitar classes should be taught by the method set up by the music program.

d. guitar classes should be taught by the music teacher already teaching in the school.

e. more records from different periods of music should be added to the collection.

f. additional areas next to the Music Room should be added for instrumental classes (piano, guitar or others), so these do not interrupt activities in the room.

Conclusions:

The Music Room has contributed to a certain degree to proper use of free time by the students as well as providing cultural enrichment for them. It provides for a chance to enjoy good music as well as contributing to developing the talent and abilities of these adolescents.

The committee believes that, according to the results obtained in the validation of the project, this could be transferred, keeping in mind the following aspects:

1. purchase less expensive equipment that is actually on the market and would serve the same purpose.
2. on transferring the idea of the Music Room, apart from teaching musical instruments, the possibility of integrating it into the library, where there are no physical facilities for a separate room, should be investigated.

APPENDIX I-A
10th grade

I. Introduction

To the student: This questionnaire is to get your ideas about the Music Room in your school. You need not sign your name. We ask you to answer the questions frankly. The questionnaire has four parts, but they are short. Each part has specific instructions, which you should read carefully before answering.

Thanks for your cooperation with our work.

II. Instructions:

Part A - In the columns to the right of each question, put a check mark in the column that best reflects your opinion.

III. Questionnaire

Questions	Much	Some	Little	No
1. Do you like the Music Room in your school?	(22)	(12)	(3)	(0)
2. Do you visit the Music Room?	(8)	(16)	(11)	(1)
3. Have your experiences in the Music Room helped you to relate to other people in the community?	(10)	(14)	(9)	(4)
4. Have these experiences helped you to become more involved in your other subjects?	(5)	(19)	(7)	(5)
5. How much do your parents know about the Music Room in your school?	(1)	(14)	(15)	(6)
6. Have your music experiences helped you in your life outside the school?	(21)	(7)	(4)	(4)

Questions	Much	Some	Litle	No
7. How do your friends like the Music Room?	(18)	(17)	(2)	(0)
8. Has the Music Room helped in preparing your assignments?	(11)	(11)	(7)	(7)

Part B. In this part you will answer "yes" or "no". Put a check mark to indicate your answer. Also, fill in the blanks with the correct word or phrase when necessary

Questions	Yes	No
1. Do you think the Music Room should be continued in operation?	37	0
2. Have you learned to play an instrument? Which? guitar - cuatro piano 2	11	25
3. Have you earned money playing an instrument?	0	33
4. Have you taken part in activities at a) the school 8 b) the community 4 c) outside de community? 2	14	21
5. Would you like to make music your a) profession 13 b) favorite pastime? 14	27	8
6. Has the Music Room made any change in yourself?	24	13

Part C. In the following multiple choice questions, put a circle around the letter that is the best answer for you.

1. In which one of the following activities do you spend most of your free time?

- 19 A. Go to the Music Room
- 8 B. Go to the library
- 1 C. Take part in sports
- 15 D. Sit in the school yard to talk with friends
- 0 E. Go to the store near the school

2. Which kind of music do you like best?

- 10 A. popular
- 7 B. classic
- 13 C. romantic
- 0 D. electronic
- 5 E. folklore

Part D. We would like to know your ideas, opinions or recommendations about the Music Room and how to improve its operation. Be brief.

1. Good entertainment.
2. If it could have uptodate records and have more space.
3. Wonderful, since we have a good place to go.
4. I am happy that now I have some place to go and don't have to be going hither and yon.
5. The Music Room is heavenly and I thank God we have it and I am asking that everyone else like me can have a similar one.
6. There should be professional music teachers, not student instructors teaching musical instruments.
7. One more teacher needed.

11th grade

I. Introduction

To the Student: This questionnaire is to get your ideas about the Music Room in your school. You need not sign your name. We ask you to answer the questions frankly. The questionnaire has four parts, but they are short. Each part has specific intructions, which you should read carefully before answering.

Thanks for your cooperation with our work.

II. Instructions:

Part A - In the colums to the right of each question, put a check mark in the column that best reflects your opinion.

III. Questionnaire:

Questions	Much	Some	Little	No
1. Do you like the Music Room in your school?	(11)	(24)	(3)	(0)
2. Do you visit the Music Room?	(6)	(19)	(10)	(0)
3. Have your experiences in the Music Room helped you to relate to other people in the community?	(6)	(12)	(16)	(3)
4. Have these experiences helped you to become more involved in your other subjects?	(1)	(10)	(16)	(8)
5. How much do your parents know about the Music Room in your school?	(7)	(13)	(15)	(2)
6. Have your music experiences helped you in life outside the school?	(10)	(16)	(4)	(8)
7. How do your friends like the Music Room?	(21)	(14)	(3)	(0)
8. Has music in the Music Room helped you prepare your assignments?	(4)	(19)	(11)	(4)

11th Grade

Part B. In this part you will answer "yes" or "no". Put a check mark to indicate your answer. Also, fill in the blanks with the correct word or phrase when required.

Questions		Yes	No
1. Do you think the Music Room should be continued?		37	0
2. Have you learned to play an instrument? Which?		5	32
3. Have you earned money playing an instrument?		0	37
4. Have you taken part in activities at			
a) school	9		
b) community	12		
c) outside the community?	2	23	14
5. Would you like to make music your			
a) profession	8		
b) favorite pastime	28	36	
6. Has the Music Room made any changes in yourself?		15	22

Part C. In the following multiple choice questions, put a circle around the letter that is the best answer for you.

1. In which one of the following activities do you spend most of your free time?

- 6 A. I go to the Music Room
- 15 B. I go to the Library
- 1 C. I take part in sports
- 19 D. I sit in the school yard to talk with friends
- 0 E. I go to the store near the school

2. What kind of music do you like best?
- 27 A. Popular
- 9 B. Classic
- 23 C. Romantic
- 7 D. Electronic
- 4 E. Folklore

Part D. We would like to know your ideas, opinions or recommendations about the Music Room and how to improve its operation. Be brief.

12th grade

I. Introduction

To the student: This questionnaire is to get your ideas about the Music Room in your school. You need not sign your name. We ask you to answer the questions frankly. The questionnaire is in four parts, but they are short. Each part has specific instructions, which you should read carefully before answering.

Thanks for your cooperation with our work.

II. Instructions:

Part A. In the columns to the right of each question, put a check mark in the column that best reflects your opinion.

Questions	Much	Some	Little	No
1. Do you like the Music Room in your school?	(19)	(16)	(1)	(0)
2. Do you visit the Music Room?	(3)	(24)	(7)	(0)
3. Have your experiences in the Music Room helped you to relate to other people in the community?	(6)	(24)	(10)	(2)
4. Have these experiences helped you to become more involved in your other subjects?	(11)	(14)	(10)	(0)
5. How much do your parents know about the Music Room in your school?	(5)	(19)	(9)	(3)
6. Have your music experiences helped in your life outside the school?	(10)	(20)	(6)	(0)
7. How do your friends like the Music Room?	(20)	(16)	(0)	(0)
8. Has music in the Music Room helped you prepare your assignments?	(13)	(15)	(7)	(0)

12th grade

Part B. In this part you will answer "yes" or "no". Put a check mark to indicate your answer. Also, fill in the blanks with the correct word or phrase when required.

Questions	Yes	No
1. Do you think the Music Room should be continued?	(36)	(0)
2. Have you learned to plan an instrument? Which? 4 piano, 1 trumpet	(5)	(30)
3. Have you earned money playing an instrument?	(1)	(34)
4. Have you taken part in activities of a) school 15 b) community 4 c) outside the community 1	(20)	(15)
5. Would you like to make music your a) profession 3 b) favorite pastime 27	(30)	(2)
6. Has the Music Room made any changes in yourself?	(24)	(12)

Part C. In the following multiple choice questions, put a circle around the letter that is the best answer for you.

1. In which one of the following activities do you spend most of your free time?

- 17 A. I go to the Music Room
- 5 B. I go to the library
- 3 C. I take part in sports
- 12 D. I sit in the school yard to talk with friends
- 0 E. I go to the store next to the school

2. What kind of music do you like best?

- 17 A. Popular
- 4 B. Classic
- 14 C. Romantic
- 3 D. Electronic
- 3 E. Folklore

12th grade

Part D. We would like to know your ideas, opinions or recommendations about the Music Room and how to improve its operation. Be brief.

1. Everything is quite good
2. Put in air conditioning
3. Have better armchairs and tables in the room
4. There should be separate areas for piano and other instruments
5. There should be a specific day for each homeroom group
6. The room should be larger and have fans
7. The Music Room is a very sane pastime
8. Have more up to date records
9. The room is one way of communicating with people trained in music who can help a student to continue studying music or some special instrument.

Total tabulation

I. Introduction

To the student: This questionnaire is to get your ideas about the Music Room in your school. You need not sign your name. We ask you to answer the questions frankly. The questionnaire has four parts, but they are short. Each part has specific instructions, which you should read carefully before answering.

Thanks for your cooperation with our work.

II. Instructions:

Part A - In the columns to the right of each question, put a check mark in the column that best reflects your opinion.

III. Questionnaire:

Questions	Much	Some	Little	No
1. Do you like the Music Room in your school?	52	52	7	0
2. Do you visit the Music Room?	19	59	28	1
3. Have your experiences in the Music Room helped you relate to other people in the community?	22	50	29	9
4. Have these experiences helped you to become more involved in your other subjects?	17	43	33	13
5. How much do your parents know about the Music Room?	22	46	39	11
6. Have your music experiences helped you in life outside the school?	41	43	14	12
7. How do your friends like the Music Room?	59	47	7	0
8. Has music in the Music Room helped you prepare your assignments?	28	45	25	11

Total tabulation

2. What kind of music do you like best?

- 54 A. Popular
- 20 B. Classic
- 40 C. Romantic
- 10 D. Electronic
- 9 E. Folklore

Part D. We would like to have your ideas, opinions or recommendations about the Music Room and how to improve its operation. Be brief.

Total tabulation

Part B. In this part you will answer "yes" or "no". Put a check mark to indicate your answer. Also, fill in the blanks with the correct word or phrase when required.

	Questions		Yes	No
1.	Do you think the Music Room should be continued?		110	0
2.	Have you learned to play an instrument Which?		21	87
3.	Have you earned money playing an instrument?		1	105
4.	Have you taken part in activities at			
	a) school	34		
	b) community	19		
	c) outside the community?	5	58	50
5.	Would you like to make music your			
	a) profession	24		
	b) favorite pastime	69	93	10
6.	Has the Music Room made any changes in yourself		63	47

PART C. In the following multiple choice questions, put a circle around the letter that is the best answer for you.

1. In which one of the following activities do you spend most of your free time?

- 42	A.	I go to the Music Room
- 28	B.	I go to the library
- 5	C.	I take part in sports
- 31	D.	I sit in the schoolyard to talk with friends
- 15	E.	I go to the store near the school

SOME OPINIONS EXPRESSED IN THE INTERVIEWS

A. Teachers:

I feel very pleased and proud of having this in my school.

I think the project should continue because it has benefited the students from the rural zone and those socio-culturally deprived.

Yes, it has improved school discipline and there are fewer absences and dropouts.

About 75% of the students stay in the school instead of in the street (during their free time)

Students who formerly didn't go to the library now do their assignments in the Music Room listening to music.

It is a need in the senior high.

It has aroused interest in other schools, who have come to visit us to see how it operates.

Many pupils have become more alert, have developed leadership and this is transferred to the classroom.

B. Students:

I use the room to do my assignments.

I am very happy with the room and think it is the best thing done in the school.

I have two free periods and I spend them in the Music Room.

I don't like to be absent now that there is the Music Room.

I didn't know how fascinating it was to play the piano until I had a chance to do it.

We've learned here to play the guitar and to compose something now.

I belong to the Music Club.

The one thing I'm sorry about is that I graduate this year and I won't be able to continue my piano classes.

This Christmas we played happy, gay music for the people of Ciales.

APPENDIX I - C

Project #26 Functioning of a Music Room in the senior high school.

Approved February 16, 1971

Operational: February 16, 1971

Aspects: Piano Classes

Guitar and mandolin classes

Project objectives:

To provide the Music Room with enough equipment and materials to offer socio-cultural experiences (music specially) that will enrich the cultural life of the students, help to develop musical abilities and the appreciation for good music.

	1970 - 71
School enrollment	595
Clientele affected:	
Piano classes	16 students
Instrument classes	3 student instructors
guitar	10 students
mandolin	5 "
Total	34

	1971 - 72
School enrollment	601
Clientele affected:	
Piano classes	19 students
Guitar classes (Oct - Dec. 1971	1 student instructor 5 students

STUDENTS IN PIANO CLASSES

Teacher: Sra. Aurea Jordán September 1972

First Group

Name	Grade	Residence	Began Classes
1. María S. Rosario	12	Pozas (Rural)	February 16, 1971
2. Altagracia Rosario	12	Pozas	" " "
3. Providencio Martes	12	Cialitos	" " "
4. Noel Rodríguez	12	Pozas	" " "
5. Pedro Rivera	12	Pozas	" " "
6. Juan F. Cruz	12	Pozas	" " "
7. Roberto Mojica	12	Cordillera	September 1971
8. María M. Martes	12	Cialitos	February 16, 1971
9. José A. Sánchez	12	Cordillera	" " "
10. Olga M. García	11	Pozas	September 1971
11. Teresita Maldonado	11	H.V. Cumbre	" "
12. Olga Colón	11	Barahona	" "

Second Group New

Name	Grade	Residence	Began Classes
13. Enid Berrios	11	Urban	September 1972
14. Víctor Huertas	10	"	" "
15. Daniel Menéndez	11	"	" "
16. Carmen Y. San Miguel	10	" (Urb. 2 Ríos)	" "
17. Jorge Villafañe	10	Caliche	" "
18. Myrna Alvarado	11	Urban (Urb. 2 Ríos)	" "
19. Elba Marrero	11	Cordillera	" "
20. Oscar Cruz	11	Pozas	" "
21. Carmen I. Santa	10	Frontón	" "
22. Carmen I. Montes	10	Frontón	" "

10 ---- 5
11 ---- 8
12 ---- 9
22

Zone Rural ----- 17
Zone Urban ----- 5
22

Began: February 16, 1971 ------ 8
September 1971 ------ 4
September 1972 ------ 10
22

APPENDIX I - D

REPORTS BY GUITAR AND MANDOLIN INSTRUCTORS

1970 - 71

Instructor: Adán Aulet   Instrument: Mandolin

Students in the class:

1. Gloria Cruz - Pozas - 12°
2. Isabel Rodríguez - Pozas - 12°
3. Manuel del Río - Pozas - 11°
4. Heriberto Montes - Pozas - 11°
5. Javier Chapel - Pueblo - 11°
6. Carmelo Miranda - Jaguas - 10°

June 1, 1971

Lessons Given

First part

1. What is music?
2. The different parts of the instrument
3. Solfeggeo without the instrument
4. What are musical measures
5. Tuning the instrument
6. Exercises with the natural scal Do - C major
7. Beginning practice on the songs:
    1. Lamento Borincano - Bolero
       Do Major
    2. El Rosal - Vals

Adán A. Aulet
(student instructor)

Instructor: Eliu de Jesús Guitar

Students

1. Sonia Berríos - Pozas - 12°
2. Nélida Pagán - " - 12°
3. Edna Martínez - " - 12°
4. Erick A. Colón - " - 10°
5. Jorge Cruz - " - 11°
6. José A. de Jesús - " - 10°

July 12, 1971

Report:

March 15, 1971, to April 15, 1971

1) Teach lines and spaces of the staff
2) Learn name of each line and space
3) Rapid recognition of these
4) Learn some notes outside of the staff

April 15, 1971, to May 15, 1971

a) A major and minor scales
b) E major and minor scales
c) D major and minor scales
d) B major and minor scales
e) G major and minor scales

May 15, 1971, to May 27, 1971

1) General practice of all scales
2) Practice in rapid tuning

Eliú de Jesús (students instructor)

Instructor: Norberto Millán Instrument: Guitar

Students

1.	María M. Márquez	C. Cruces	10°
2.	Carmen M. Rivera	"	10°
3.	Héctor Rivera	Jaguas	12°
4.	Luis Soto	Pueblo	11°
5.	Luis A. Millán	C. Cruces	11°

I teach playing by ear.

Project #26 Operation of Music Room in the Juan Ríos Serpa Senior High

Duties of Student Aides:

1. Know the functions of the room and help to give them publicity.
2. Handle equipment and keep it in good condition
3. Cooperate on orienting new students on use of equipment
4. Watch to see equipment is used properly.
5. Keep discipline among students in attendance and among themselves.
6. Cooperate in classifying and organizing Music Room materials so these can be used more efficiently
7. Cooperate in keeping daily and monthly attendance records and help in preparing these reports.
8. Help the teacher in charge and other personnel in decorating the room.

This should be well planned.

APPENDIX 1 - E

ATTENDANCE RECORD BY GRADE, SEX, PERIOD AND ACTIVITIES IN THE MUSIC ROOM

Month September Year 1972-73

	Grade and Sex									Total	
	X			XI			XII				
	F	M	Total	F	M	Total	F	M	Total		Gran Total
Attendance	321	428	749	370	483	853	277	422	699	F 968 M 1,333	2,301

Daily average: 143.8

Grade with highest attendance: XI

Period with highest attendance: 9:50 - 10:40 A.M.

Sex with highest attendance: Boys

Visitors:

Teachers 8 Parents:

Local supervisors: 11 , Regional 5 , Central 2

Other visitors:

Number of activities carried out in cooperation with the Music Room: 1

Number of publicity activities: 3

ATTENDANCE: MUSIC ROOM - PROJECT #26

Month ------------ September, 1972

September	1	162
	3	180
	6	216
	7	100
	8	90
	11	84
	12	127
	13	150
	14	169
	18	164
	19	169
	20	92
	21	154
	22	132
	25	139
	28	171
		2,301

Days room open---------------------------------- 16

Average daily attendance------------------------ 143.8

Attendance by grade and sex:

Grade	M	F	Total
X	428	321	749
XI	433	370	853
XII	422	277	699
Total	1 333	968	2301

Attendance by periods:

8:00 - 9:00	325
9:00 - 9:50	415
9:50 - 10:40	436
10:40 - 11:30	4 24
12:30 - 1:50	365
1:50 - 3:00	336
	2,301

Project #26, Music Room in the Juan Ríos Serpa Senior High

Report of activities in the Music Room, September

1. Orientation given to student instructors of the project, given by Mrs. Colón and the teacher in charge of the room.
2. Schedule worked out for guitar classes by student instructors and students enrolled in these. Responsibilities of the instructors and their students discussed.
3. Decoration of the room planned with the audiovisual coordinator, Mr. Rodríguez, Project #8 coordinator Miss Lourido, Mrs. Colón de Rodríguez and the art teacher, Mrs. Teresa A. Ríos.
4. Mr. Mojica, technician, visited the room to check equipment and give instructions on handling equipment to the new aides. He gave them demonstrations.
5. Record player requested and received from the Center for Educational Resources through the coordinator for Project #8, Miss Lourido, to be used for folk dancing.
6. A list of records and materials needed for the room sent to the assistant purchasing agent for Title III, Mrs. Pérez.
7. Mrs. Colón and Miss Lourido visited the Center for Educational Resources at Buchanan to coordinate with Mr. Cordero, CER Director, in securing the following:
    - a) speed up preparation of a brochure on the Music Room
    - b) build a record file
    - c) prepare an album on the project and exchange ideas on decorating the room.

8. Planned with teachers activities related to curriculum areas in cooperation with the Music Room:

    a) Spanish class for _____ students of _____ grade by the teacher, Miss Emma Camacho and the teacher in charge of the Music Room on Folklore Music of Puerto Rico, September 7, 1972

    b) English class activity being planned by the English teacher, Mr. Felipe Llanis, with the teacher in charge for use of the Music Room.

9. The teacher in charge had an interview with Mr. Lozada, member of the Ciales Cultural Center, to see about carrying out an activity in the Music Room in cooperation with the Cultural Center.

10. Meeting of the Music Club, in which the teacher in charge oriented them about:

    a) Aims of the room

    b) Responsibilities of each member

    c) Purpose of Club:

        1) cooperate in operation of the room

        2) activities to raise funds for improving the room

        3) cooperate in publicizing the project

    d) Election of officers at the next meeting

11. Interviews with students for their impressions about the room.

Expressed themselves as very happy, "fascinated", at having a place to listen to music in their free time. Indicated there is a variety of kinds of music.

12. Mr. Cordero, CER Director, visited the room

13. Statistical records of the room maintained and kept up to date.

    a) Daily attendance. For September this was 2,301 students: 968 girls and 1,333 boys

    b) Average daily attendance was 143.8 students

    c) Most students attending were from 11th grade

    d) More boys attended than girls

    e) 27 visitors to the room.

14. News about the world of music was collected

PROJECT #26 - MUSIC ROOM

Cost Analysis

Item	1969-70		1970-71		1971-72		Total	
A. Personnel	Federal	State	Federal	State	Federal	State	Federal	State
Instructional	$4,186,46	$254,00	$3,631,58	$417,17	$3,682,55	$450,00	$11,500,59	$1,121,17
Classified	1,210,56	-	1,873,92	31,50	1,468,80	326,40	4,553,28	357,90
Contract	-	-	361,92	-	1,830,00	-	2,191,92	-
Instructors	-	-	432,00	-	374,00	-	806,00	-
B. Fringe benefits	590,13	30,22	636,24	54,91	727,42	90,77	1,953,79	175,90
C. Equipment								
Title III	-	-	175,14	-	537,36	-	712,50	-
D. Materials	-	-	-	-	1,142,43	-	1,142,43	-
E. Physical Plant	-	-	-	-	-	180,00	-	180,00
F. Equipment for rooms	-	-	-	-	-	2,75	-	2,75
Total	$5,987,15	$284,22	$7,110,80	$503,58	$9,762,56	$1,049,92	$22,860,51	$1,837,72
Grand Total	$6,271,37		$7,614,38		$10,812,48		$24,698,23	
Enrollment		586		599		601		
Cost per pupil		$ 10,70		$ 12,71		$ 17,99		

APPENDIX 2

VALIDATION PROCESS

Check Sheet

Title: Music Room in the Juan Ríos Serpa Senior High School, Ciales

District: Ciales Date: January 23, 1973

I. Indicate by a check mark in the proper column your rating of each area according to the scale:

0 - Nothing at all
1 - Unsatisfactory
2 - Satisfactory
3 - Outstanding
4 - Excellent

Areas	0	1	2	3	4
1. The strategies used in the project contribute to solve problem (s) identified in the study of needs				X	
2. The project presents evidence to show the operational objectives were effectively reached				X	
3. The project presents evidence to show the instruments used provide objective and realiable information			X		
4. The project presents an analysis of cost-effectiveness that reflects a relationship between the costs and the performance of participants		X			
5. Analysis of cost-effectiveness indicates the project is practical (The money spent is justified by the product)				X	
6. The project can be observed both visually and communicably					X

Areas	0	1	2	3	4
7. The project has concept or practices obviously original, unusual and exemplary					X
8. The project offers innovative procedures, techniques and practices that can be disseminated				X	
9. The project has made a significant contribution to the educational system				X	

EXTERNAL EVALUATION REPORT

CLOSED - CIRCUIT TELEVISION SYSTEM

PROJECT # 29

EXTERNAL EVALUATION

Title of Project	Project #29 CCTV: Segunda Unidad La Loma, Barranquitas, P.R.	
Project Director	Victor N. Cruz, Principal José Arnaldo Meléndez, AV Coordinator	
Budget	$ 10, 836 (Title III)	
Project Period	June 1970 From	May 1973 To
Target Population	32 teachers 786 students 10 other officials	
On-site Visit Dates	May 2, 1973 From	May 3, 1973 To
External Evaluator	Margarita Guillot Signed	

OBJECTIVES	ACTIVITIES TO ACHIEVE OBJECTIVE	ACTIVITIES TO FIND OUT SUCCESS IN ACHIEVING OBJECTIVES
I. For teachers:		
1.1. To achieve higher standards in teaching by using the best and most advanced educational methods.	1.1. To use C.C.T.V. in seminars for teachers in the presentation of the latest and the best in educational methods.	1.1. An improvement of teaching materials is evident in classes after teachers attended the seminars.
2.1. To improve the planning and the presentation of lessons by using C.C.T.V.	2.1. To use the facilities of C.C.T.V. in teaching by planning the presentation with the coordinator and the subject advisors. Examine evidence of lessons planned and presented.	2.1. The evidence examined showed different methods of presenting basic concepts using the C.C.T.V. facilities.
3.1. To make better use of the time in the classroom.	3.1. To learn more effective teaching techniques by planning with coordinator the use of C.C.T.V.	3.1. Interview teachers to find out the results of material taught with C.C.T.V. facilities.
4.1. To prepare the teachers to give more attention to students with individual learning problems.	4.1. Students may be grouped or seated individually according to their learning level and use the facilities of C.C.T.V. They may advance at different rates.	4.1. Visit classrooms and observe use of C.C.T.V. by different groups. Interview teachers to find out results.
5.1. To become better acquainted with their students.	5.1. To work with students to present C.C.T.V. programs. Examine programs produced.	5.1. Interview students to learn how a closer relationship and better understanding develops with their teachers, as a result of working together.
6.1. To learn to prepare more teaching materials using AV methods to make teaching concepts more attractive and effective.	6.1. With the help of the C.C.T.V. coordinator, teachers learn to prepare and use AV materials.	6.1. Visit classrooms to observe teachers using the material prepared. Talk to students to learn how they feel about classes that use media.

OBJECTIVES	ACTIVITIES TO ACHIEVE OBJECTIVE	ACTIVITIES TO FIND OUT SUCCESS IN ACHIEVING OBJECTIVES
II. For students:		
1.1. To enrich educational experiences of students in the elementary and intermediate school levels especially in Spanish, Social Studies, Art, and Music.	1.1. With the help of the C.C.T.V. coordinator, plan meetings twice a month to use facilities of C.C.T.V. to supplement and enrich the concepts taught in Spanish, Social Studies, Art, and Music.	1.1. Interview teachers and examine evidence of lessons using C.C.T.V.
	1.2. To produce educational materials using C.C.T.V. by students and teachers in units of study.	1.2. Examine materials produced using C.C.T.V.'s facilities.
	1.3. To use C.C.T.V. materials produced by W.I.P.R. Channel 6, the Resource Center at Buchanan and other educational institutions.	1.3. Examine evidence of the C.C.T.V. programs used.
2.1. To make use of C.C.T.V. in the Home Room period and the Activities period.	2.1. Take an inventory to determine the students' interests in different grade levels during these periods.	2.1. Interview students to learn topics that interest them.
	2.2. Get students to produce programs using C.C.T.V. that appeal to most of them, as determined by the inventory.	2.2. Examine evidence of the programs produced by viewing them in C.C.T.V. Interview students.
	2.3. Use C.C.T.V. to enrich cultural background of students.	2.3. Examine programs produced using C.C.T.V. to enrich culture.
	2.4. Determine, by the use of a questionnaire, the use of C.C.T.V. at La Loma.	2.4. Study the answers to the questionnaire.

PART II

INSTRUCTIONS

1) In the following questionnaire your are asked to give one or two word responses to the questions. Please try to be as precise and incisive as possible. It may be helpful for you to keep in mind the following basic categories, but do not feel constrained by them:

(4)	Excellent; first rate performance; to a large degree
(3)	Good; satisfactory performance; to an acceptable degree
(2)	Fair; limited performance; to a limited degree
(1)	Weak; unsatisfactory or inadequate performance; hardly at all
(0)	Could not be observed
-	Not applicable

2) Some responses request a short written statement based on your own understanding of the project.

EVALUATION QUESTIONNAIRE

Project #[illegible] E.C.T.V. Segunda Unidad La Loma   Date May 2, 1973

Section I. General

1) To what extent does the project implement the following general concepts?

a. Individualized instruction   excellent 4

b. Community involvement   satisfactory 3

c. The relationship of learning to the students' total living experience i.e., does the project relate meaningfully to the problems and experiences the students meet daily outside the classroom?   excellent 4

d. Fosters and/or demonstrates new roles for teachers which emphasize the learning process of the individual?   excellent 4

2) How great a contribution does (or can) the project make to education in Puerto Rico? That is, what degree of impact on education in the state does (or can) this program have?   a great contribution 4

3) Based on your knowledge of education in Puerto Rico, would you say that this project demonstrates "creative" and "innovative" responses to educational problems?   "creative" 4

4) How great are the possibilities of transplanting the program in another school or area?   it has good possibilities 3

5) To what extent do you feel the students' behavior and/or academic performance have probably improved since the beginning of the project? (Based on a. comments from student and staff in the project, b. comments from teachers, etc., who are not directly involved in the project and c. your observations of evaluation data collected by the staff.)   greatly improved 4

6) To what extent are students in the project enthusiastic about the project?   very enthusiastic 4

7) What do you infer to be students' general attitude toward project staff?   very cooperative attitude

OG 008 899

COMMENTS:

Section 1.

1. a) After interviewing teachers and observing classes, it is evident that individualized instruction is well planned and executed.

b) I viewed excellent programs produced where members of the community participated. It showed that they were well planned with the coordinator.

c) The evidence examined showed that the programs relate meaningfully to the daily problems and experiences of the students. When the students were interviewed they emphasized this.

d) In the rural area where La Loma school is located, teachers with very limited facilities for acquiring new educational roles, find very valuable the seminars held using C.C.T.V.

2. C.C.T.V. **makes** a great contribution to education in Puerto Rico because it reaches more students. With our extremely populated island teachers need the facilities of C.C.T.V. to do a better job.

4. Since La Loma is a remote rural area and Project 29 is doing such an excellent educational contribution, I feel that it can be transplanted to any area or school.

5. Both the behavior and academic performance of students have improved greatly with the implementation of C.C.T.V. at Segunda Unidad La Loma. Grades of tests show better grasp of concepts.

6. Students now take great pride in their performance at school. They are eager to participate in C.C.T.V. programs and to learn how to use equipment.

Section II. Staff

8)	To what extent is there an adequate number of staff for carrying out project activities?	fair	2
9)	To what extent are the project staff enthusiastic about the project?	very enthusiastic	4
10)	What kind of rapport does staff seem to have with students?	excellent rapport	4
11)	How aware are individual staff members of overall goals, objectives and philosophy of the project?	almost all are aware	3
12)	Do you feel that as a result of being exposed to this project, staff and teachers are using improved approaches to learning? In other words, are teachers --after experience with this project -- better able to perceive possibilities for improving the learning environment?	are improving learning environment	4

Total number of points: 17

Section II. Staff

8) The staff in the project is very limited. An assistant to the director of the C.C.T.V. project and a secretary are needed. The members of the faculty help the director, but it is more productive for them to be planning or producing programs rather than doing administrative or clerical work.

11) Individual staff members who have attended seminars are aware of the overall goals, objectives and philosophy. I recommend seminars held often during the year to afford an opportunity for all members of the faculty to attend.

12) Staff and teachers are using improved approaches to learning as the evidence of materials produced showed.

Section III. Equipment and Budget

13) To what degree are the materials, equipment and facilities of the project adequate for achieving project objectives?	fair	2
14) To what degree are the available materials and equipment being used creatively and effectively by project staff?	excellent use	4
15) How great are the possibilities for local funding after Title III funds are terminated?	weak	1
16) To what extent are the project's financial records being properly kept?	well kept	4

Total number of points: 11

COMMENTS:

Section. III. Equipment and budget.

13) The equipment for the C.C.T.V. is very inadequate due to the poor facilities for repairing it. It takes four and five months to repair it at Buchanan. Also there is only one camera and by the amount of work planned by teachers there is need for another one. Only twelve TVs are working in the classrooms, five cannot be repaired. More TVs are needed. The monitor often has to be repaired.

14) Available material is used creatively and effectively. The C.C.T.V. director, the school director and the district director cooperate in obtaining materials from other sources.

15) Local funding is very weak. Once the funds available under Title III are terminated there would not be money to continue the project.

16) Financial records are properly kept. There is need for petty cash for minor purchases such as for bulbs because it takes too long before minor parts are replaced.

Section IV. Dissemination

17) How successful has project staff been in publicizing their program?

a.	to teachers in the district who are not directly involved in the project	good	3
b.	to parents	successfully publicized	4
c.	to the community at large	fairly publicized	3
d.	to students in the district who are not directly involved in the project	fair "	2

18) To what extent (i.e. how frequently) have the following media been utilized in publicizing the project's activities?

a.	newspapers	could not be observed	0
b.	pamphlets/brochures	excellent publicity	4
c.	radio/TV	could not be observed	0
d.	talks and exhibits	good	3
e.	conferences/workshops	fair	2
f.	slides/films	excellent publicity	4

19) Generally, how would you describe the quality of the project's dissemination efforts?	fair	2

Total Number of points: 27

COMMENTS:

Section IV. Dissemination.

17) a) Teachers in the district are aware of the project, but few have been able to visit it or use its facilities because the project has only been in full operation since January 1972. The director of the project was on political leave from September 1971 till November 9, 1971. Previously, the project staff had not been appointed. Later on, the camera was broken. The repairs to the building to install the C.C.T.V. studio were not completed until January 1972.

18) a) There are no local newspapers nor radio/TV where the project's activities may have been publicized.

b) The publicity for the project has been mostly with pamphlets produced at school, in talks and exhibits, and with slides.

e) The Caguas district to which Segunda Unidad La Loma belongs has publicized the CC.T.V. project in its conferences and workshops.

19) The quality of the project's dissemination efforts could be improved.

Section V Evaluation

20)	To what extent has the staff systematically gathered data on the program?	excellent data gathered on the program	4
21)	To what extent has the project developed an evaluation strategy?	good	3
22)	To what extent has the project acquired, or developed if necessary, evaluation instruments?	could not be observed	0
23)	To what extent are the evaluation instruments appropriate for the task?	could not be observed	0
24)	To what extent has the project implemented its evaluation strategy?	good	3

Total Number of Points: 10

COMMENTS.

Section V. Evaluation.

20) The project director and staff have gathered excellent data on the programs presented.

21) For the evaluation of the project a questionnaire was passed administered to the students and one to the teachers.

22) Since the project has only been producing C.C.T.V. programs since January 1972, it has not developed evaluation instruments.

VI. PROJECT OPERATION : (Briefly assess the quality and/or adequacy of the elements listed below).

Personnel : The school director at the C.C.T.V. project 29, Segunda Unidad La Loma, and the project coordinator are doing an excellent job. They are enthusiastic and capable. They have been able to arouse the faculty's interest and desire to improve and enrich education through the use of C.C.T.V. They have also the cooperation and approval of the students in the use of C.C.T.V. in their classes.

Physical facilities : The C.C.T.V. studio is adequate. The classrooms have also adequate facilities for viewing the programs.

Budget : The amount of money requested is not enough for the needs of increased staff and equipment, as previously stated. I recommend the approval of the budget, and if possible to increase it.

Non-public School Participation : There was no evidence of non-public school participation in C.C.T.V. programs.

Community Involvement: The evidence examined of the community's participation is laudatory. Judging from the enthusiasm of the community increased participation will continue.

Extent of involvement of students, teachers, and parents: The majority of the teachers and students and many parents are involved in C.C.T.V. at La Loma, judging from the examination of the programs produced, the questionnaire submitted and the interviews with students and teachers. Also from observing classes using C.C.T.V. programs.

Extent of general interest and enthusiasm shown by faculty, students, parents, and others: The faculty, students, parents, and other personnel at La Loma are very enthusiastic and showed marked interest in the C.C.T.V. project. Everyone expressed full appreciation of the implementation of the project and expressed their desire to continue working to improve it.

Comments: I was very well impressed with the work done: the project director, the C.C.T.V. coordinator, the faculty, students, and the community. I think they are all doing an excellent job.

Section VII - Summary

A. What do you consider the project's greatest strengths?

I consider that the greatest strengths of the project are its contribution to enrich and innovate education in Puerto Rico. Also the magnificent opportunity to bind the school and the community in a common effort to make better citizens. Last, but not least, the "new role" of the teachers in educational technology and their awareness of self improvement.

B What do you consider the project's greatest problem areas?

The project's greatest problem areas are the delay in the repair of equipment, the limited budget and staff.

C. What modifications would you recommend for the program? How might project staff correct the problem areas you mention above?

I recommend that more technicians are made available to fix equipment right at the studio, or that if it is a major break, that it does not have to wait so long for the equipment to be fixed. Also that equipment can be lent to the project while theirs is being fixed, so as not to stop the use of C.C.T.V. An increase in the project staff will help to produce more and better programs.

D. Do you think the project should be continued? Explain.

I think that the project should be continued. As it started on January 1972, it has not really performed the educational functions for which it was requested. The evidence examined, the interviews with students, teachers, and other personnel prove that it is valuable and necessary in the educational development of Puerto Rico.

E. Please indicate any additional assistance you think this project needs.

Additional assistance that might be helpful in the project could be the use of TV technicians in the district to repair equipment.

F. Any other comments you would like to make :

My congratulations to the school director, the C.C.T.V. coordinator, the faculty, the students, and the members of the community at La Loma for doing such an excellent job. Also to the Superintendent of Schools of Barranquitas and the Caguas' Region , and other personnel for their assistance in establishing the C.C.T.V. in La Loma.

EVALUATION REPORT

Project #30 - Strenghthening of Language Arts at Elementary Level
through the Use of Closed Circuit Television,
Godreau School, Salinas District

Introduction:

1. Clientele: 76 pupils from third and fourth grades: two groups of third grade and one fourth grade group.

2. Budget assigned

Instructional personnel	$20,160.00
Classified personnel	2,475.00
Audiovisual equipment	3,828.00
Materials	900.00
Total	$27,463.00

Objectives of Project:

General Objective

To strengthen the Language Arts Program in projection with other programs

Specific Objectives

1. Strengthen basic skills and enrich language arts in grades K-6 in both urban and rural zones in the following phases: reading, writing, oral expression and listening of 7% in each phase.

2. Attain better control of basic skills and enrichment through conseling and re-orientation of participating personnel.

3. Attain through proper use of closed circuit television an effective projection of methods, techniques and knowledge.

Purpose of evaluation:

To determine the increase in basic skills in language arts among pupils K-6 in the Salinas School District as a result of implementation of Project #30, Law 91-230

A. Objectives of visits:

1. Establish comparisons through a study of results of pre-test and intermediate-tests given pupils K-2 in Palmer Second Unit and pupils 3-6 in the Godreau School.

2. To gather evidence that the close circuit television system is an effective means for training teaching personnel in grades K-2 in the Palmer Second Unit and grades 3-6 in the Godreau School in techniques, methods and knowledge of the basic skills in language arts (read, write, listen and oral expression)

B. Observations made during the visit:

1. Only the Godreau School was visited, since it was only there the closed circuit television system was being used.

2. Four teachers worked in the project.

3. Only five classrooms are wired for use of the television system. This limited the school use to just these five rooms.

4. Persons working on producing the programs lack the professional preparation for producing educational television; they have had only an informal orientation. The program is carried live to the classroom. Pupils in the program have taken tests in Spanish; those groups whose reading scores were very low took a test in reading phonemes at the beginning of the school year and the same test again in April. The results of these two tests are as follow:

Reading of 48 phonemes
% of phonemes read by 4th grade pupils

%	Pre-test (August)	Post-test (April
100	0	6
97	1	3
95	0	1
93	0	2
91	0	1
89	0	0
87	0	0
85	0	0
83	0	2
81	0	2
79	0	1
77	0	0
75	0	0
73	0	0
71	0	0
68	0	1
66	1	0
64	0	0
62	1	0
60	1	1
58	0	0
56	0	0
54	1	0
52	0	1
50	0	0
48	0	
45	1	
43	0	
41	3	
39	0	
37	0	
35	0	
33	2	
31	0	
29	0	
27	0	1
25	1	
23	0	
21	0	
18	0	
16	2	
14	4	
12	2	

%	Pre-test (August)	Post-test (April)
10	1	
8	0	
6	0	
4	0	
2	0	
1	0	
0	0	

The third grade that participates in the project is composed of a group of handicapped children, for whom there is no evidence of a phoneme test.

Training has been offered the teachers in the use of the basic series, the global method, remedial writing and reading. Most of this training was given at district level and at no time was the television system used as a means of communication in the training sessions. According to information from the television teachers and the principals of the schools, the training topics were those asked for as meeting the needs of the teacners during the current school year, but they were not designed to meet the objectives of the project.

Three weekly programs are being offered to take care of language arts. The television system has been functioning only during the last two months because repairs were needed.

Materials requested for use in the project have not been received.

Conclusions:

1. Facilities for producing television programs are limited for the kind of program that should be produced to meet the objectives of the project. They do not permit taking care of distant schools.
2. Existing CCTV facilities are not used to the full.
3. Through the pre-test and post-test it can be seen the group participating in the project has improved in achievement.

Recommendations:

1. Training for persons who work in producing television programs
2. Develop programming for a larger audience
3. Improve the technical quality of the programs
4. Greater participation of classroom teachers in planning and development of the programming.
5. Use the CCTV system for teacher training at the same time as it is used for learning activities.

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF EDUCATION
REGIONAL OFFICE
MAYAGUEZ, PUERTO RICO

VALIDATION, PROJECT NO. 32
SAN GERMAN

A. Committee Members :

1. Pilar S. de Rivera - Assistant Director
2. Rosario Montalvo - English Supervisor
3. Eulogio Pérez - Assistant Superintendent
4. Gilberto Quiñones - Principal, School
5. Juan Rivera Berdecía - Central Planner
6. Víctor Cabrera - Evaluation Coordinator
7. Wilda Jiménez de McConnel - General Supervisor of English

B. Work Schedule of committee in San Germán district

November 21 :

8:30 - 10:00 a.m.	Meeting in superintendent's office
10:00 - 12:00 noon	Visit to project
1:00 - 4:30 p.m.	Gathering evidence and interviewing personnel providing it.

November 22 :

8:30 - 12:00 noon	Visits, questionnaires, testing
1:00 - 4:30 p.m.	Interviews, tabulation of tests and questionnaires

December 5 :

A.M.	Analysis of documents, begin preparation of preliminary report
P.M.	General meeting with local personnel

VALIDATION REPORT

Project No. 32 - English Laboratory in the Dr. Jaime Sancho Cardona School, San Germán

I. Project Description

Project No. 32 in the Dr. Jaime Sancho Cardona School, San Germán, consists of an English laboratory that stresses oral communication skills in English as a second language. It is designed to take care of a clientele of 75 seventh grade pupils with low grades in English. They were divided into troups of 25 students each for periods of 50 minutes three times a week. The project is planned to handle a new clientele each year it is in operation.

The project makes use of new strategies and the production of innovative materials. A full-time English speaking teacher is in charge of the laboratory. The laboratory is provided with multi-sensory equipment to make the task easier.

II. Project Objectives

A. 60 of the 75 pupils with low grades in English will have improved their ability to understand and speak the language.

B. The pupils will become acquainted with different American cultural patterns.

C. Modern teaching methods and appropriate techniques will be incorporated into the project.

Observations on the Objectives :

The anticipated goal of the objectives is not expressed in specific terms, as there is no indication of the degree of proficiency in understanding and speaking the language to be attained.

Of the 75 pupils to be the proposed clientele, only 55 appear in the list.

One criterion for selection was poor achievement in English yet there are 16 pupils with A and B grades.

The American cultural patterns to be emphasized are not stated precisely.

The modern techniques to be used are not specified.

III. Procedures used in the validation :

A. Strategies

1. Meeting of Validation Committee to prepare schedule of work
2. Meeting with project personnel (See Guide for First Visit).
3. Observe a class (See Guide for Observation).
4. Analysis of materials used in the project
5. Interviews with parents, laboratory teacher, 8th and 9th grade English teachers, vocational counselor, English zone supervisor and local school administrators.
6. Preparation, administration, study and analysis of the results of a test given to a sample of the clientele (See copy of tests and tabulation).
7. Questionnaire administered to parents and a sample of clientele (See questionnaire and tabulation).

B. Documents examined

1. Materials used by the laboratory teacher
    a. tapes

        b. mimeographed materials

        c. visuals

    2. Comparative table of grades obtained by the pupils in English before, during and after being in the project (See table).

    3. Progress report of a sample of the clientele, only evidence of progress submitted (See Progress Report and tabulation).

    Comments: The only documents examined were those listed above, as no others were available.

IV. Results of Validation

A. Attainments

1. Materials produced - the evidence submitted does not support the attainments claimed for the following reasons :

    a. the tapes used were produced for other projects, some from the Central Office and others in other laboratories

    b. the quality of the tapes was not adapted to the requirements of the project. It was not the best for use in an English class

    c. mimeographed materials were not produced locally

    d. according to the teacher, the visual materials used had been brought from the Center for the Production of Materials, Fort Buchanan. During the current year it was observed the production of some materials had begun.

    e. the questionnaire to the parents shows 54% of those interviewed believe their child had improved in the regular English class while in the project. Also, 60% felt their child had a more positive attitude toward the language.

2. Strategies developed, according to observations and conversations with the teacher, we concluded :

   a. up to this year the teacher has not had the necessary help in teaching techniques.

   b. documents used by the teacher for diagnosing student needs at the beginning of project show

      1) two types of diagnostic tests were used: oral and written. Written test does not agree with the objectives of the project as it stresses grammar items from the regular English program. The oral test is used in the pronunciation project for 7th grade. It measures pronunciation only. There was no evidence on the results of these tests.

      2) There was no evidence of criteria used by the teacher to group pupils according to the skills they had or did not have.

      3) There were no instruments to confirm evidence offered by the teacher on achievements of the pupils during the year. She provided individual records but no instruments for confirmation of progress during the year.

4) We cannot say whether the instruments are adequate or not (valid or reliable) because there was no evidence on them.

5) The teacher has not received all the equipment the project requires, so that innovative strategies could not be identified in terms of use and handling of equipment.

A tape recorder from another project was used. Only four earphones work of the eight in the room.

The necessary tapes for the project have not arrived. Some from other projects were used and some belonging to the teacher. Neither have the necessary recordings been received.

c. In the individual records the teacher mentions the use of other pupils to give individual help to companions.

3. Effective use of laboratory teacher

a. interviews with 8th and 9th grade English teachers and with the laboratory teacher show the latter is used occasionally as resource for oral work in the regular classes.

b. The three regular English teachers interviewed stated pupils show a positive attitude toward the English class so long as they are in the laboratory but this does not continue after they are no longer part of the project.

B. Progress of the clientele

a. A study of pupil achievement in the regular English class shows improvement while they go to the laboratory. (See table on progress profile). Nevertheless, we cannot say whether this is what is expected, since the proposal objectives do not indicate the degree of achievement anticipated. As we pointed out earlier, we were not offered the instruments used to measure the achievement in the English laboratory during the year and thus we cannot conclude the results are valid and reliable.

b. For the committee to judge objectively the success in academic achievement a test based on materials used by the teacher was prepared and given to a sample of 23 pupils from the total 56. (See document on sample) The test showed improvement by the pupils according to their mental ability revealed in the general ability test given them in the 4th grade. (See table of pupil performance in the tests compared with results of the general ability tests.)

c. The Validation Committee established a 50% performance on the test prepared by them as satisfactory. An analysis of tests results showed the following :

1. test results were 30% above expectations and 70% below.
2. in the part on auditory discrimination of phonemes, 87%

performed above the norms set by the committee; in production of sounds 22%; in intonation 87%; and in oral expression 49%. (See tabulation of test given by the committee.)

Observations

Student achievement has possibly been affected by the following factors explained by project personnel: laboratory attendance is voluntary and is affected by the school schedule (they go in the other interlocking session for their regular classes) and by transportation services, since a great many students in the project come from rural areas.

d. the student questionnaire shows 100% of the student had trouble speaking English before going to the laboratory. 30% report improvement in fluency in speaking English after attending laboratory sessions and 52% report greater interest in reading and writing the language developed in the laboratory. (See tabulation of student questionnaire)

V. Cost analysis - (See copy of this in the Appendices)

VI. Check list (See Appendix No. 2)

VII. A. General Conclusions :

In view of results of this validation of successin the project, the committee concludes this is not yet ready to be transferred totally or in any part. Nevertheless, we could observe that, during the current school year, production has begun on some materials that could be transferred in the future. Also, training of a teacher was begun that could bring help in using some strategies such as individualized instruction, use of monitors, use of available technology for dealing with students having needs similar to those in the project.

B. Recommendations:

1. All equipment should be kept in good running condition.
2. The current school schedule should be revised so that laboratory attendance is not affected.
3. The teacher should be trained in preparation of instruments suitable for measuring the achievement level of students, for diagnosing deficiencies and for measuring progress over a period of time.
4. Also, the teacher should be trained to prepare guides and units to be developed in the project.

APENDICES

A. Committee members and work schedule

  1. Guide for first visit
  2. Guide for class observation
  3. Test administered
  4. Tabulation of test
  5. Comparative chart of work done in the laboratory
  6. Improvement in achievement shown by pupils in project
  7. Performance table of pupils
  8. Comparative study of General Ability test results and student performance
  9. Pupil sample
  10. Questionnaire to pupils and tabulation
  11. Questionnaire to parents and tabulation
  12. Check list
  13. Cost analysis

Guide for First Visit

First Visit: Questions to be asked personnel interviewed

1. In what way does the project show innovation?
2. What innovative parts of the project could be transferred to other nuclei?
   a. Which would the District be willing to transfer? Explain.
3. What experiences have you had, if any, in transferring projects?
4. To what degree have the project objectives been attained? Explain.
5. What impact has the project had on the school where developed?
   a. pupils
   b. teachers
   c. community
   d. school administration
6. What will be the future of the project when Title III funds end?
   a. teacher
   b. equipment
   c. materials produced
   d. experiences gained
7. How have you felt working with the project these past years?

Guide for Class Observation and Discussion

I. Class

1. What is the objective (objectives) of a class? Were these attained?
2. What motivation activities were used?
3. What activities were used in class presentation?
4. What were used in the application?
5. What relation was there between the objectives and the activities?
6. What teaching techniques were used? Did these contribute to making the pupils independent in their study and work as they developed skills in use and application of what they were learning?
7. How were individual differences taken care of in the development of the class? Was knowledge and understanding of the pupils revealed?
8. What teaching materials were used? Were these used in a suitable, effective way?
9. Does the teacher demonstrate control of subject content being taught? What was the mental preparation?
10. Did all pupils take part in the class? What was the teacher's attitude toward this aspect?
11. Were new viewpoints observable in the development of the class?

12. What did the pupils learn?

13. How did the teacher control the group?

14. Was the assignment clear and specific?

15. How did the teacher carry out the routine tasks? (Take attendance, pass out books, etc.)

II. Appearance and organization of classroom

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ENGLISH LABORATORY
SAN GERMAN SCHOOL DISTRICT

I. Below you will find a series of words in pairs, listen carefully as the teacher reads one word in each pair.

Underline the one she reads;

EXAMPLE :

a. bad - bed   b. hit - heat

1. hat - hot
2. cot - cut
3. live - leave
4. land - lend
5. look - Luke
6. vat - bat
7. they - day
8. think - sink
9. cheap - ship
10. sin - sing

II. Read the following words silently.

Read each word aloud when the teacher tells you.

1. ran
2. Yale
3. island
4. plumber
5. carrot
6. these
7. thin
8. whole
9. bought
10. jail
11. stand
12. shoe
13. caps
14. caps
15. eyes

III. Read the following sentences silently.

Read each sentence aloud when the teacher tells you.

1. Is John here?
2. John is here?
3. I want pencils, books and notebooks.
4. Do you want cookies or a piece of cake?
5. María is going, isn't she?

Student's name ______________________________

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SAN GERMAN SCHOOL DISTRICT

Student's name ______________________________

IV. Look at this picture carefully. Answer the questions the teacher asks with complete sentences.

EXAMPLE:

What do you see in front of the building?

I see cars in front of the building.

1. What are the children doing?

2. How many children do you see in the picture?

3. What color is the bus?

4. Why are the children wearing jackets?

5. Do you think they live in Puerto Rico? Why

Questions	Oral comprehension	inflections	agreement	word order	completeness	cultural pattern	
1.						X	
2.						X	
3.		X				X	
4.						X	
5.							

N qt. 5 - cultural pattern

X - does not apply

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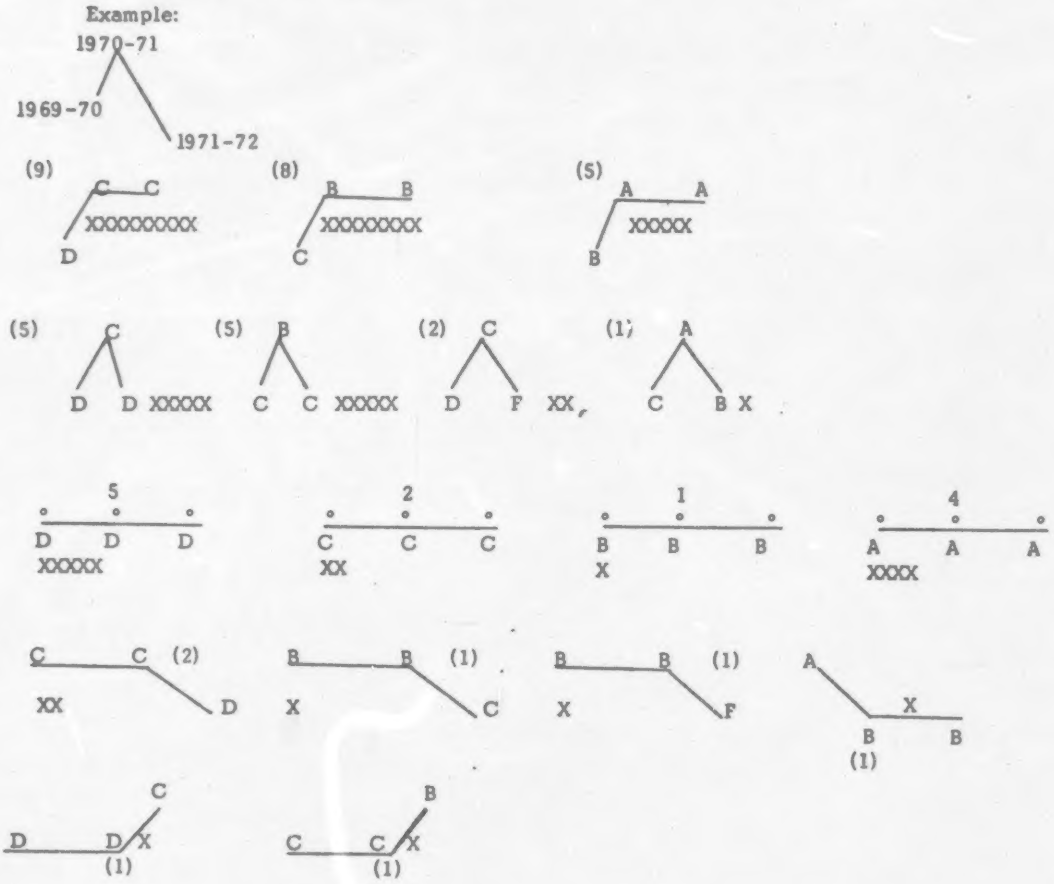
DR. J. SANCHO CARDONA SCHOOL
SAN GERMAN SCHOOL DISTRICT

Comparative chart of work done by students in the English laboratory in 1970-71 and 1971-72.


Example:
1970-71
1969-70
1971-72
(9) D C C XXXXXXXXX
(8) C B B XXXXXXXX
(5) B A A XXXXX
(5) C D D XXXXX
(5) B C C XXXXX
(2) C D F XX
(1) A C B X
5 D D D XXXXX
2 C C C XX
1 B B B X
4 A A A XXXX
C C D (2) XX
B B C (1) X
B B F (1) X
A X B B (1)
D D X C (1)
C C X B (1)

(1970-71)

(34)*	34	pupils	of	53	improved	64%
= 66%	18	"	"	53	had no change	34%
	01	"	"	53	lowered their grade from A/B	02%

(1971-72)

(34)*	→22	pupils	of	53 continued progress
= 66%	17	"	of	dropped back
	→12	"	of	had no change in the 3 years
	02	"	of	raised their grade in the 3rd. year

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DR. J. SANCHO CARDONA SCHOOL
SAN GERMAN SCHOOL DISTRICT

Improvement in achievement shown by pupils in the English laboratory.

	August			December			May		
	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor
Listening & Speaking	8%	16%	64%	4%	28%	60%	12%	32%	32%
Reading paced by a recording	4%	20%	24%	16%	28%	36%	20%	28%	12%
Oral Composition	8%	24%	56%	8%	36%	44%	12%	32%	28%
Reading	4%	24%	16%	20%	36%	24%	20%	28%	08%
Dictation	8%	16%	16%	12%	24%	28%	20%	28%	16%
Writing	8%	16%	16%	12%	48%	12%	20%	32%	12%
Listening & Repeating	12%	12%	8%	12%	36%	20%	32%	28%	8%
*Average	7.4%	18.3%	28.5%	14.0%	38.3%	32.0%	19.4%	29.7%	16.6%

*	Sample showed 38 of 52 pupils had improved.	65.4%
**	The actual improvement was	12.0%
	"Poor" from 28% to 16%	12%
	"Fair" from 18% to 30%	12%
	"Good" from 7% to 19%	12%

*** Thirteen pupils had "f" in English class after they lift the English laboratory.

TABLE OF STUDENT PERFORMANCE ON TEST GIVEN AS COMPARED WITH RESULTS ON THE GENERAL ABILITY TEST.

Actual	Performance	Expected Performance	Difference
75 - 100	1	8	-7
51 - 74	6	1	+5
26 - 50	15	7	+8
0 - 25	1	7	+6
Total	23	23	+12

12 students, or 52% of those taking the test, performed above the ability level shown in the General Ability Test.

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ENGLISH LABORATORY
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SAN GERMAN SCHOOL DISTRICT

COMPARATIVE STUDY OF RESULTS ON THE PUERTO RICAN GENERAL ABILITY TEST (1971 - 72) AND STUDENT PERFORMANCE

P.G.A.T. percentilae				
95+	3		4-Q	21.42%
95	1			
90	2			
85	2			
80	3			
75	1	12		
70	1		3-Q	8.92%
65	1			
60	2			
55	0			
50	1	05		
45	3		2-Q	30.34%
40	5			
35	3			
30	3			
25	3	17		
20	3		1-Q	23.21%
15	4			
10	4			
5	0			
-5	2	13		
	*9	+9 56		16.11% 100.%

*Could not be placed

	Score		
	Below	Normal	Above
4-C	9	3	0
3-C	3	2	0
2-C	6	9	2
1-C	0	10	3
(47)	18	24	05
*9 56			

In % terms

Below	37.54%
Normal	37.42%
Above	8.93%
	16.11%
	100.0%

SAN GERMAN SCHOOL DISTRICT

PROJECT NO. 32

TABULATION OF TEST GIVEN TO A SAMPLE

Student names	PART I Discrimination of Sounds 87% = + 13% = –											PART II Production of Sounds 22% = + 78% = –																					PART III Intonation 87% = + 13% = –						PART IV Oral 49% = + 51% = –										
	1	2	3	4	5	6	7	8	9	10	Total Incorrect	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total Incorrect	1	2	3	4	5	Total Incorrect	1	2	3	4	5	6	Total Incorrect	GRAND TOTAL	Zila	Incorrect	Correct
1. Arroyo Arroyo, Marta											0	x	x	x				x	x	x								x	x		x	9						0							0	9	97	22%	78%
2. Ayala Rivera, Marilyn		x			x	x	x		x	x	6		x	x	x	x		x	x		x	x	x	x	x		x			x	x	14						0		x	x	x	x		4	24	40	59%	41%
3. Cervantes, Eric		x	x			x					3		x	x	x	x		x	x	x	x	x		x	x	x	x	x	x	x	x	17	x			x		2		x	x	x	x	x	5	27	35	66%	34%
4. Colón Lugo, José						x			x		2	x	x	x	x	x			x	x	x	x			x	x	x	x			x	14				x		1		x				x	2	21	95	51%	49%
5. Corderos Linares, Luis C.		x				x			x	x	4	x	x	x	x	x	x		x		x	x	x		x			x		x	x	14	x			x	x	3	x	x	x	x	x	x	6	27	03	59%	41%
6. Jusino, Bill			x		x		x			x	4	x	x	x	x	x	x	x	x	x	x	x	x		x		x	x		x	x	17	x		x	x	x	4		x	x	x			3	28	80	68%	32%
7. Lugo, Marilyn		x					x		x	x	4	x		x	x		x	x	x	x	x	x			x					x	x	12	x				x	1		x	x	x			3	20	40	49%	51%
8. Mari González, Herohilda							x			x	2	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x			x	17				x	x	2		x	x	x	x		4	25	10	61%	39%
9. Martell Medina, César		x	x	x	x				x		5	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x		x	x	18						0	x	x	x	x	x	x	6	29	15	71%	29%
10. Nazario, Augusto											0	x		x		x	x	x	x	x	x	x	x		x	x	x		x		x	15	x			x	x	3		x	x	x	x	x	5	23	60	56%	44%
11. Ortíz Rodríguez, María M.		x	x			x	x		x	x	6	x	x	x	x	x		x	x	x	x	x		x	x		x			x	x	15	x			x		2		x	x	x		x	4	27	20	59%	41%
12. Pabón Santiago, Rubén		x									1		x	x	x	x					x	x						x			x	8	x			x		2		x	x	x	x	x	5	16	75	39%	61%
13. Martínez, Ramón		x		x					x		3	x		x	x	x					x	x	x		x				x	x	x	11						0		x	x	x			3	17	No	41	59
14. Quiñones Irizarry, Ulises									x	x	2	x	x	x			x			x				x	x	x		x			x	10	x					1		x			x		2	15	85	36	64%
15. Rivera Casiano, Zoraida		x				x				x	3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	20	x			x	x	3	x	x	x	x	x	x	6	32	10	79%	21%
16. Vega, Wanda		x					x		x	x	4	x		x	x	x		x	x	x	x	x	x		x		x	x	x	x	x	16	x		x	x		3	x	x	x	x	x		5	28	30	68%	32%
17. Torres, Milagros		x	x			x	x		x		5	x		x	x	x	x	x	x	x	x			x			x			x	x	13	x					1		x	x	x	x	x	5	24	No	59%	41%
18. Sánchez Cabán, José		x	x		x	x					4	x	x	x	x	x		x	x	x	x	x	x		x			x	x	x	x	16	x		x	x	x	4	x	x	x	x	x	x	6	30	90	73	27%
19. Santos Montalvo, Luis		x					x		x	x	4			x	x	x					x	x	x			x			x		x	9	x		x			2		x	x			x	3	18	No	44	56%
20. Vázquez Santiago, Evelyn		x				x	x		x		4		x	x	x		x	x	x	x	x		x	x	x	x	x	x			x	15					x	1			x				1	21	90	51%	49%
21. López López, Eric		x							x		2	x		x	x	x		x	x	x		x	x		x	x	x		x	x	x	15						0	x	x	x	x	x	x	6	23	25	56%	44%
22. Martínez, Ana		x	x						x		3	x	x	x	x	x		x	x	x	x	x	x		x			x	x		x	15						0		x	x	x	x		4	22	15	54%	46%
23. Morales, Geofreg			x						x		2		x	x	x	x				x	x					x			x		x	9	x				x	2						x	1	14	85	34%	66%
TOTAL																																																		

572

#4

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF EDUCATION
DR. JAIME SANCHO CARDONA SCHOOL
ENGLISH LABORATORY
SAN GERMAN, SCHOOL DISTRICT
SAN GERMAN, PUERTO RICO

Name	7th grade final grade	8th grade final grade		Sex
1. Alicea Cruz Wanda	D	C	Ancones	F
2. Arocho Suárez Edwin	C	B	Went to Guayama	M
③ Arroyo Arroyo Marta - R	A	A	Caín Alto	F
④ Ayala Rivera Marilyn	D	C	Cas. El Recreo	F
⑤ Barrios Casiano Nilsa	D	C	Pueblo Nuevo	F
⑥ Cervantes Erica	D	C	Cas. Las Lomas	M
⑦ Colón Lugo José - R	B	B	Ancones	M
8. Colón Santiago Luis	D	B	Pueblo Nuevo	M
⑨ Cordero Linares Luis C.	D	D	Retiro	M
⑩ Cruz Torres Angel C. - R	D	D	Ancones	M
11. González Lugo Walter	C	C	Calle Concepción	M
12. Guzmán Homar José L.	C	C	Calle San Sebastián	M
13. Irizarry Martínez Linda - R	D	D	Bo. Maresúa	F
⑭ Jusino Méndez Gil G.	D	C	Calle Borinquen 19	M
15. Jusino Santana Samuel - R	D	D	Ancones #44	M
⑯ Lugo Lugo Henry	D	D	Variante	M
⑰ Lugo Suárez Marilyn	D	C	Cas. El Recreo	F
⑱ Mari González Herohilda	D	D	Calle San Seb.	F
⑲ Martell Medina César	D	D	Pueblo Nuevo 52	M
20. Martell Medina Mirta	D	D	Pueblo Nuevo	F
21. Martínez Padilla Olga L.	D	D	Cas. El Recreo	F

Circled students were the sample

	Name	7th grade final grade		8th grade final grade		Sex
22.	Martínez Sánchez Ana - R	C		C	Caín Alto	F
23.	Martínez Sánchez Ramón - R	D		C	Caín Alto	M
24.	Morales Rodríguez Geofrey - R	C		B	Ancones	M
25.	Nazario Augusto	C		C	Bo. Bosque	M
26.	Oliveras Irizarry Edwin - R	D		D	Caín Alto	M
27.	Ortiz Ramos Nydia I.	C		B	Ensanche Ramírez #40	F
28.	Ortiz Rodríguez María M. - R	D		C	Bo. Maresúa	F
29.	Pabón Santiago Rubén	C		B	Urb. Arquelio Torres 35	M
30.	Pabón Torres Wilfredo - R	C		C	Guamá	M
31.	Padovani Martínez Elizabeth	D		D	Bo. Ancones - S.G.	F
32.	Quiles Pérez Luz - R	D		D	Bo. Cotto	F
33.	Quiles Pérez María - R	D		C	Bo. Cotto	F
34.	Quiñones Irizarry Ulises	C		B	Cas. El Recreo	M
35.	Quiñones Cruz Marizeth	D		D	Cas. El Recreo	F
36.	Ramírez Alicea José M.	D		D	Pueblo Nuevo Arriba 202	M
37.	Rivera Casiano Zoraida - R	D		D	Hoconuco Bajo	F
38.	Rivera Irizarry Laudelino	D		D	Retiro	M
39.	Rivera Rodríguez Luis A.	D		D	Caserío Las Lomas	M
40.	Rivera Rosado Jorge W. - R	F		D	Hoconuco	M
41.	Rodríguez Morales Santos	D		C	Pueblo Nuevo	M
42.	Sáez Negrón Nicolás	D		C	Universidad Inter	M
43.	Sánchez Cabán José	D		C	Urb. Niboni	M
44.	Sánchez Mercado Maribel - R	D		C	Hoconuco Bajo	F
45.	Santos Montalvo Luis	C		C	Variante 21	M
46.	Silva Servera Wanda	C		B	Pueblo Nuevo	F
47.	Sepúlveda Martínez Carlos	D		D	Porta Coeli	M
48.	Sepúlveda Valentín Elizabeth	D	Not in school, illness	C	Bo. Ancones	F
49.	Tirado Santiago Fred W.	D		C	Retiro	M
50.	Torres Velázquez Milagros	C		C		F
51.	Torres Villanueva Brunilda - R	B		B	Caín Alto	F

Name	7th grade final grade	8th grade final grade		Sex
52. Vázquez Rodríguez Marilú - R	F	D	Guamá	F
53. Vázquez Santiago Evelyn	C	B	Pueblo Viejo 199	F
54. Vega Flores Wanda	D	C	Urb. Arquelio Torres	F
55. Velázquez Valle Carlos J.	D	C	Urb. Villa Int.	M
56. López López, Eric	D	C	Urb. El Recreo	M

PROJECT NO. 32
ENGLISH LABORATORY
DR. JAIME SANCHO CARDONA SCHOOL
SAN GERMAN, PUERTO RICO

STUDENT QUESTIONNAIRE

We appreciate all the cooperation you can give us to improve the English Laboratory in your school.

Indicate with an (X) the answer, or answers, for each question :

1. Do you like English?

30.4	7	great deal
56.5	13	some
13.0	3	not at all

2. Do you like to see televised programs in English?

43.5	10	Yes
56.5	13	No

3. Do you like to speak English?

17.3	4	a great deal
56.5	13	some
26.0	6	no

4. Do you like movies with English sound?

56.5	13	Yes
43.5	10	No

5. Have you gone to any school in the states?

56.5	13	Yes
43.5	10	No

6. Before coming to the English Laboratory

____A- Did you speak English fluently?

100.0 _23_ B- Did you have trouble speaking English?

7. After work in the English Laboratory

30.4 _7_ A- Do you speak English easily?

69.6 _16_ B- Do you have trouble with English?

8. The help I have had in the English Laboratory has helped me in reading and writing English

8.6 2 A- a great deal

65.0 15 B- some

17.8 4 C- little

8.6 2 D- not at all

9. The help I have had in the English Laboratory has helped me in other subjects

8.6 2 A- great deal

52.1 12 B- some

26.3 6 C- little

13.0 3 D- not at all

10. I feel that in the English Laboratory

52.1 12 A- I have become more interested in reading and writing English

21.5 5 B- I have the same interest as before in reading and writing

17.8 4 C- I have very little interest in reading and writing English

8.6 2 D- I have no interest in reading and writing English

Name ______________________________

Grade ________________ Group __________

PROJECT NO. 32
ENGLISH LABORATORY
DR. JAIME SANCHO CARDONA SCHOOL
SAN GERMAN, PUERTO RICO

Questionnaire to parents with children working in the English Laboratory project.

We appreciate all the cooperation you can offer us to improve the English laboratory in the Dr. Jaime Sancho Cardona School.

Indicate with an X the answer, or answers, to each question.

1. Do you know about the English Laboratory in the Dr. Jaime Sancho Cardona School?

36.3%	4	Yes
63.7%	7	No

(If the answer is No, go to question No. 3)

2. In what way(s) did you learn about the laboratory?

20%	1	School visits
		School communications
80%	4	Talking with my son or daughter
		Talking with neighbors
		Others (specify)

(Go to question No. 5)

3. Although you say you knew nothing about the English laboratory, could you tell us something about the work your child did in English this past year?

40%		Poor work
40%		Satisfactory work
		Out standing work
20%	2	Don't Know

(If the answer is No, go to question No.5 and then to No.9)

4. What do you think was the reason (poor, satisfactory, outstanding) for the work done by your child last year?

(Check one or more reasons)

Poor work

45.4% /5/ little interest

18.2% /2/ didn't read or study

☐ didn't practice spoken English

9.1% /1/ didn't go to class regularly

☐ other

Satisfactory work

18.2% /2/ was interested in the class

☐ read and studied English regularly

☐ practiced spoken English occasionally

☐ went to class regularly

☐ other (specify)

Outstanding work

☐ was very interested in the class

☐ read and studied English often

☐ practice spoken English often

☐ always went to class

☐ other

5. Has your child gone to a school in the states or other English speaking country?

☐ Yes

100% /11/ NO

6. Has the English laboratory helped your child?

54.5% /6/ Yes

45.5% /5/ No

7. In what way has the English laboratory helped?

(Check one or more answers)

60% /3/ Has a positive attitude toward English

☐ practices spoken English at home

☐ reads books and magazines in English

20% /1/ has improved in his classwork

20% /1/ other

8. Why do you say the English laboratory has not helped your child?

(Check one or more answers)

66.6% /4/ isn't interested in the English class

16.7% /1/ showed no improvement in class

/ / didn't practice spoken English

16.7% /1/ didn't do class assignments

/ / didn't read

/ / other

9. Do you find your child is doing better work in English than two years ago? Is his (her) attitude and interest toward English better than two years ago?

63.6% /7/ Yes

27.8% /3/ No

9.2% /1/ Don't know

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF EDUCATION
OFFICE OF THE SUPERINTENDENT OF SCHOOLS
DEMONSTRATIVE DISTRICT
SAN GERMAN, PUERTO RICO

COST ANALYSIS

PROJECT NO. 32

SCHOOL YEAR 1971-72

Prepared by:

Miss Hilda Acosta, Regional Planner

Mrs. Concepción Pagán Merheb, Local Planner

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF EDUCATION
OFFICE OF SUPERINTENDENT OF SCHOOL
SAN GERMAN, PUERTO RICO

COST ANALYSIS
PROJECT 32 - ESTABLISHING A LANGUAGE LABORATORY
LEVEL: DR. JAIME S. CARDONA URBAN JUNIOR HIGH SCHOOL
1971 - 72

COMPONENTS	No	Part	Full	Regular Program	Title III	Other	Time with project	Cost to project 1971-72
I. Personnel								
A. Instructional personnel								
1. Principal, Juniorhigh	1		X		$ 8,520.00		10%	$ 852.00
2. English laboratory coordinator	1		X			$5,520	100%	$5,520.00
3. Vocational counselor	1		X		$ 7,620.00		10%	$ 762.00
4. English teachers	4		X		$21,180.00		10%	$2,118.00
2 at $635.00								
1 at $595.00								
1 at $535.00								
5. Others								
School superintendent	1		X		$10,620.00		5%	$ 531.00

COMPONENTS	No.	Part	Full	Regular Program	Title III	Other	Time with project	Cost to project 1971-72
Assistant Superintendent	1		X	$9,540.00	$ 0,000.00		5%	$ 477.00
Assistant Superintendent D.D.	1		X		$ 1,233.33		33 1/3%	1,233.33
Local planner	1		(5months)		3,000.00		33 1/3%	3,000.00
Regional planner	1		X		3,400.00		33 1/3%	3,400.00
Audiovisual coordinator	1		X	6,420.00			10%	642.00
Regional English supervisor	1		X	8,520.00			6 2/3%	568.00
Local English supervisor	1		X	7,920.00			20%	158.00
B. Classified personnel								
1. Janitor	1		X	3,120.00			5%	156.00
Total A+B				$83,460.00	$13,153.33			$19,417.73
C. Fringe benefits								
1. Instructional personnel								
Bonus 4%				$3,213.60	$ 545.21			
Retirement 8.5%				5,115.30	1,158.58			$2,119.71
State Insurance Fund 1%				803.40	126.60			316.48

II. Equipment	No. of units	Unit price	Total cost	Useful life	Depreciation	Current value
A. Regular Program						
arm chairs	24	8.45	197.76	12	3.60	116.40
desk	1	55.20	55.20	15	24.84	30.36
cabinet	1	38.50	38.50	10	18.90	19.60
desk chair	1	6.50	6.50	9	1.70	4.80
cubicles	6	34.95	209.70	5	11.65	139.80
			507.55			310.96
classroom	1	8,000.00	8,000.00			5,032.00
B. Project equipment						
cubicles	7	34.95	244.65	5	11.65	81.55
metal chairs	12	4.50	54.00	12	1.70	33.60
tape recorders	1	195.00	195.00	5	117.00	78.00
overhead projector	2	270.00	540.00	3	225.00	90.00
screens	1	51.75	51.75	5	31.05	20.70
film projector	1	600.00	600.00	5	360.00	240.00
earphones	36	10.50	368.00	5	220.00	148.00
cassette tapeplayer	5	99.95	499.75	5	166.60	333.15
			2,553.15			1,025.00

COMPONENTS	No.	Part	Full	Regular Program	Title III	Other	Time with project	Cost to project 1971-72
III. Classified personnel								
Bonus 4%				$124.80				$ 24.96
Retirement 5.5%				171.60				43.32
Social Security				150.14				30.02
State Insurance Fund 1%				31.20				6.24
Fringe benefits				$9,610.04	$1,840.09			$ 3,529.24
D. Health Services								
$7.00 c/u ea				$1,120.00	140.00			196.20
Totals A + B + C + D				$94,190.04	$15,610.42			$23,143.17

IV. Other student services

Regular Program			
Transportation	18 pupils		$ 1,440.00
School lunchroom	20 pupils		1,480.00
		Total	$2,920.00

PROJECT NO. 32 - ESTABLISHMENT OF A LANGUAGE LABORATORY

ITEM	BUDGET	ACTUAL EXPENSE
A. Personnel		
1 laboratoryteacher	$5,520.00	$5,520.00
B. Fringe benefits	828.00	828.00
C. Material	200.00	194.03
D. Miscellaneous	500.00	217.60
TOTAL	$7,048.00	$6,759.63

RESUME COST ANALYSIS

PROJECT NO. 32

1971-72

COMPONENTS	TITLE III	REGULAR PROGRAM
1. Personnel		
a) Salaries	$13,153.33	$6,264.40
b) Fringe benefits	1,840.09	1,698.85
c) Health services	140.00	56.20
2. Equipment	1,025.00	5,342.96
3. Student services		2,920.00
4. Materials	421.63	
	$16,580.05	$16,282.41
Enrollment : 75		
Average cost per pupil regular program	$217.09	
Average cost per pupil, Title III	221.06	
Average cost, combined funds, per students	438.15	
Average cost per pupil allowing for equipment depreciation	236.98	

Project No. 32

Materials

Article	Units	Unit price	Total Cost
Roll of film Ex 135 20 (Kodax Ektachrome) Color slide film	10	2.25	22.50
Roll of laminating paper	2	6.50	13.00
Roll of mica overhead Graflex OH 3,000	1	6.00	6.00
Bulbs D.V.Y. 650 W120v	6	7.95	47.70
126 film packs with development 126x20	10	4.25	42.50
Projector bulb Graflex D.L.	1	9.00	9.00
White bristol board	8pq.	3.40	27.20
Construction paper, red	6 pq.	0.47	2.82
Construction paper, green	6 pq.	0.47	2.82
Construction paper, yellow	6 pq.	0.47	2.82
Construction paper, blue - marine	6 pq.	0.47	2.82
Thumb tacks	4 doz.	1.20	4.80
Mucilage w/spreader	1 bt.	0.15	1.05
Clips	20 boxs	0.10	2.00
Scotch tape	2 doz.	0.15	3.60
Ball pens	12 doz.	0.70	8.40
Rolls EKTACHROME 135 mm	4 roll	2.25	9.00
Development and enlargement of 22 negative 8 x 10, taken of project in action		3.50	77.00

TOTAL $285.03

ITEM	Units	Unit price	Total Cost
White bri stol board	200	5.50	11.00
Construction paper, asst colors	20	.98	19.60
Mimeograph paper, letter, reams	20	1.45	29.00
Quire Stencils #40 QCP	10	3.00	30.00
Doz. Roll masking Tape 1"	1	11.00	11.00
Reams Old Concord Bond 8 1/2 x 11-16	4	3.50	14.00
Boxes carbon copy sets KTBOCPL	5	4.40	22.00
		TOTAL	$136.60

DEPARTMENT OF EDUCATION
Arecibo Education Region
Arecibo, Puerto Rico

VALIDATION REPORT

Project #35 A, Closed Circuit Television in Ernesto Valderas Junior High School
Ciales School District

Title III, Law No. 91-230 (89-10)

Submitted by the Validating Committee

1. Edna Gonzáles
2. Isabel Martínez
3. Aquilino Pérez
4. Rosa Hilda González
5. Ramón Aguilú
6. Cándida A. Ortega

24 January 1973

Arecibo Educational Region

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I- DESCRIPTION OF PROJECT:

The Ernesto Valderas Junior High School, urban, of Ciales has closed circuit television. This school has 611 students in single enrollment, with 43% of the enrollment from the urban zone and 57% from rural.

The closed circuit television was purchased three years ago under Proposal No. 35, financed with Title III funds, Law 91-230.

The project consists of a study room prepared and equipped with closed circuit television that can send both image and sound to 15 classrooms in the school. It operates on channels 8 and 10. A teacher coordinates the activities to be developed through use of the system.

The project is part of a bigger one being developed in three school districts of the Island. The Educational Resources Center at Buchanan acts as consultant.

II- Objectives of the project

A. By presenting a series of activities over the CCTV system, such as videotapes, reproduction of these, movie films, filmstrips and live programs, it will have

1. enriched the content of the programs in Spanish, social studies, mathematics, science, English, health, industrial arts, and school theather that are offered the students in the Ernesto Valderas School.
2. Oriented the students body in the following areas:
    - a. Student regulations
    - b. Library services

    c. Personality
    d. Health topics
    e. Importance of academic subject
    f. General course in senior high school
    g. Vocational courses
    h. Commercial course
    i. World of work
    j. Others

3. Trained teachers in

    a. techniques and methods of instruction
    b. new courses or programs in the school
    c. production of scripts, use of CCTV equipment and taping of programs
    d. knowledge of modern pedagogy
    e. others

III-Achievement to be validated

Expansion and enrichment of curricular programs

IV- Procedures used in the validation process

The Validation Committee at regional level met October 20, 1972, with personnel from the Division of Evaluation and Educational Development to receive orientation on the validation process to be used in the Ciales district for the following projects:

- Specialized Itinerant Instructional Services
- Special Music Room
- Closed Circuit Television

The Validation Committee began its work with Project No. 8, Specialized Itinerant Instructional Services. Because of the complexity and number of achievements to be validated, the committee worked until January 10, 1973, on this project.

On January 15 it began the validation of the other two projects: Special Music Room and Closed Circuit Television. With the idea of speeding up the work, the committee decided to divide into two groups and take care of both projects at the same time.

This report is for Project No. 35 A, Closed Circuit Television.

A- Techniques and methods used in gathering evidence

1. Meetings to
    - a. study Proposal No. 35 A
    - b. plan line of action to be followed
    - c. talk with local personnel on:
        1. purposes and procedures of the validation
        2. clarification of achievement to be validated
        3. general impressions of the personnel involved
    - d. study and analyze materials and documents related to Project No. 35 A
2. Visits to the classrooms of the following teachers:

a. Miss Nilda Rivera	(social studies)
b. Mr. Vázquez	(mathematics)
c. Mr. Alvarez	(social studies)
d. Miss Milagros Rivera	(Spanish)

Note: The use of televised programming in developing the class was observed.

3. Interviews with:

   15 students

   1 principal

   1 CCTV coordinator

   1 Title III project director

   1 vocational counselor

   16 teachers in regular and special subjects

4. Observations of a series of taped productions and those retaped at the center.

B- Documents examined:

1970-1971

1. Programs produced by persons in Project No. 35. 1970--71
2. Productions (playback) made through CCTV
3. Annual Report 1970-71
4. Activities carried out in connection with CCTV
5. Some weekly programming

1971-1972

1. Programs produced by personnel of Project No. 35, 1971-1972
2. Productions(playback) made through CCTV
3. Annual report 1971-72
4. Plan of action for 1971-72
5. Activities carried out in connection with CCTV
6. School program from August 1971 to May 1972

1972-1973

1. Series: Know Your country
    - a. Origin of Ciales
    - b. Ciales has been in a stage of real progress
2. Project No. 35 A Closed Circuit Television
   Ernesto Valderas School
   Plan of Action 1972-73
3. Series: Growing professionally

   Theme: Analytic skills
    - a. Distinguish between a fact and an opinion
    - b. Support an argument from a specific point of view
4. Series: Language arts
    - a. The Fox and The Grapes
5. Series: Science news 1972-73
    - a. Biology
    - b. Chemistry
    - c. Physics
6. Short scripts by the Production Committee
    - a. Training 1970-1973
7. Series: Know your Puerto Rico
    - a. Visiting San Juan
8. The city-state in Greece
9. Series: Geographic characteristics of our country and its geographic environment

10. Signatures of those attending meetings 1972

11. Activities during the first semester 1972-73

12. Programs produced by Project No. 35 A personnel

13. Production carried out over CCTV (taped and live) 1972-73

14. Activities carried in connection with CCTV 1972-73

15. Dissemination and propaganda activities 1972-1973

16. CCTV programming 1972-1973

17. Weekly programming

V- Results of Validation

In view of the different activities performed by the Validation Committee it has not been possible to establish satisfactorily the success pointed out by the district. Nevertheless, we have found the project has made some worthwhile efforts:

1. In classroom visits it was not possible to determine that the material used tended to enrich or broaden the content of the academic programs.

2. An analysis of materials produced or reproduced did not indicate adequate planning between the project coordinator and the teachers using the service, so that these answered the needs of the students

3. Interviews with teachers lead to the conclusion they had no clear idea of how the CCTV project could enrich or broaden the content of subject matter.

(See appendix I)

VI- Recommendations and general conclusions:

In spite of not being able to establish the success pointed out by the district, we believe the work being performed and the efforts shown by personnel in the district merit the project's being continued with the following recommendations:

A- Recommendations

1. The use of CCTV should be planned more adequately and systematically as a means of enriching and broadending the academic materials given the students. In this planning students, teachers, principals and other resource persons in the district and community should participate

2. It is suggested the Plan of Work for the school make the necessary provision for time in the school schedule, so as to promote its use.

3. Center programming should answer the needs of both teachers and students, so as to meet these needs individually.

4. CCTV should be used as a means of encouraging independent study by the students

5. Resource personnel (teachers or students) should be organized and trained to act as substitutes when the project coordinator has to be absent.

B- General conclusions

1. Interviews with teachers and students reveal CCTV can become a wonderful help in teaching, if and when it follows the recommendations given above.

2. For the next school year, at which time financing of this project ends under Title III, the district should make the necessary arrangements to incorporate it into the regular program under the direction of the Audiovisual Program.

B- ANALYSIS OF COSTS AND BENEFITS

ITEM PERSONNEL	1969-1970		1970-1971		1971-1972		TOTAL	
	Federal	State	Federal	State	Federal	State	Federal	State
A. Instructional	-	-	$2,800.00	--	$7,320.00	--	$10,120.00	--
B. Fringe Benefits	-	-	350.00	--	988.20	--	1,338.20	--
C. Equipment	-	-	$2,373.74	--	$2,503.75	--	4,877.49	--
Materials	-	-	39.56		496.50	--	536.06	
E. Physical plant	-	-	--	$150.00	--	$360.00	--	$510.00
F. Remodeling	-	-	23.00	--	20.70	--	43.70	--
TOTAL:	-	-	$5,586.30	$150.00	$11,329.15	$360.00	$16,915.45	$510.00
GRAND TOTAL	-	-	$5,736.30		$11,689.15		$17,425.45	
ENROLLMENT	-	-	--	610 est.	--	600 est.	--	--
Ernesto Valderas High School	-	-	--	9.40 x st	--	1948 x est.	--	--

Appendix No. 1

Some opinions expressed by persons interviewed:

A. Teachers

1. It help to overcome the timidness of the pupils.
2. It helps me vary the activities
3. The materials dont' arrive on time
4. Some programs help, other no. Mine doesn't.
5. Production is limited
6. There needs to be an assistant to substitute for the coordinator when the lattter is absent.
7. All the teachers should be helped equally.
8. Plan during the summer so that when August comes there is something ready.
9. Don't give the program so passively; it should be action.
10. Have other people from the community take part.
11. It's something that breaks the monotony.
12. Last semester we didn't see any program: this is the first one I've seen.
13. We go to CCTV whenever we can.
14. Last semester we met to make out work plan
15. It helps me in mathematics to present the concept in concrete form.
16. It can reach a larger number of students.

B- Students:

1. We learn things we didn't know.

2. It has been a big help to me in Spanish.

3. It's better because I understand more and because the teacher goes faster.

4. It's like being at home.

5. The programs explain better

6. Just looking at the blackboard puts us to sleep because we're bored.

7. I like CCTV.

Appendix No. 2

VALIDATION PROCESS

Check List

Project Title : Closed Circuit Television

District: Ciales Date: January 24, 1973

Indicate with a check-mark how you would classify the achievement in each one of the following areas using the following scale:

1. nothing achieved
2. unsatisfactory achievement
3. satisfactory achievement
4. good achievement
5. outstanding achievement

AREAS	0	1	2	3	4
1. The strategies used in the project contribute to solve problem(s) identified in the study of needs.		x			
2. The project presents evidence to show the operational objectives were effectively reached.	x				
3. The project presents evidence to show the instruments used provide objective and reliable information.		x			
4. The project presents an analysis of cost-effectiveness that reflects a relationship between the costs and the performance of participants.		x			
5. Analysis of cost-effectiveness indicates the project is practical (The money spent is justified by the product)		x			
6. The project can be observed both visually and communicably				x	
7. The project has concept or practices obviously original, unusual and exemplary					

AREAS	0	1	2	3	4
8. The project offers innovative procedures, techniques and practices that can be disseminated	x				
9. The project has made a significant contribution to the educational system		x			

Report on C.C.T.V. Project in the Humacao Demostration District

I. Description of project

A. Situation :

The C.C.T.V. project (#35) began with an offer to the Humacao School District by the Educational Resources Center at Buchanan.

This Center had six simple systems of C.C.T.V.which included the equipment bought by the former program of Guide Districts. With the idea of getting the greatest possible use the equipment and the most profitable use of the money invested, the Educational Resources Center offered to install one of the systems in that district.

At length, and after a process of consultations and studies, it was decided the Ana Roqué Senior High School, besides having the basic requirements for receiving the systems, had an educational problem that needed to be taken care of through ways or resources outside the usal ones then being used. The selection having been made, steps were taken at once to prepare the physical facilities:

1. Physical facilities prepared:
    - a) a room was selected and set up as a studio or recording room and the Closed Circuit Television system installed.
    - b) the walls were sound-proofed and the windows airconditioned and fitted with grills.

c) wiring was extended to 28 classrooms

d) television sets in the district were relocated.

II. Objectives of project:

1. With C.C.T.V. it is hoped that by the end of 1972-73, the following goals will have been reached:

a) at least 75% of the students will have higher achievement from the orientation received

b) at least 30% of the teachers in classrooms will use properly and regularly the programming given over C.C.T.V. for enrichment of the teaching-learning process.

c) at least 50% of the teaching staff will become aware of the need to diversify and enrich the educational process through use of educational technology.

d) at least 50% of the teaching staff in our school will be involved in the circulation and distribution of materials and audiovisual equipment available in C.C.T.V. and that these be used effectively and to the fullest extent.

III. Procedure used in validation:

A. Selection of validation committee

1. Central Office and Regional Office selected the following persons:

a. Ana de Jesús de Soto A. V.

Coordinator, Ceiba

b. Lucía Martínez de Cruz

Superintendent of Schools, Ceiba

c. Salustiano de Jesús

Assistant Principal, Fajardo

d. Eustaquia Figueroa Flores

General Supervisor, Humacao Region

e. Carmen Delfaus

General Supervisor, A. V., Humacao Region

f. Nelly Castro

Analyst, Central Office

Educational Evaluation and Development Program

2. Group orientation to validation committee members by Department of Education personnel from the Planning and Development office.

B. Strategies used :

1. Meetings :

a. October 19,1972, the validation committee met in the regional office to plan the different activities to be carried out for validating the project

b. December 8 the validation committee met again in the regional office to continue outlining the goals to be set up for validating the project

Later the committee met with Mr. Jesús Vega Martínez, school superintendent, and other personnel from this office. Miss Nelly Castro, Central Office analyst, explained the purpose of the visit by the validation committee and at the same discussed the C.C.T.V. project with him.

Finally, the committee went to the Ana Roqué High School with the idea of interviewing those participating in the C.C.T.V. project, explaining the work of the validating committee and giving them a schedule of visits and other documents.

1) school principals

2) academic teachers and the production teacher

3) C.C.T.V. coordinator

The school organization was discussed and its effect, if any, on the project, (see organizational chart of school), responsibilities of the C.C.T.V. coordinator, the C.C.T.V. program coordinator and other members of the committee. They reported also on the orientations and preparations for beginning the project.

High School Ana Roqué

Enrollment 1971-72

Course	10°		11°		12°		Total		Grand Total
	M	F	M	F	M	F	M	F	
General	177	223	154	207	146	135	477	565	1,042
Commercial	31	100	29	177	31	87	91	304	395
Vocational	139	177	98	18	81	31	318	66	384
Oc. Div.	9	14	4	9	4	9	17	32	49
Ed. Dist.	8	13	6	15	6	14	20	42	62
	364	367	291	366	268	276	923	1,009	
TOTAL	731		657		544		1,932		1,932

Enrollment 1972-73

Course	10°		11°		12°		Total		Grand Total
	M	F	M	F	M	F	M	F	
Gen.	166	186	156	218	101	96	423	500	923
Com.	29	111	24	85	37	154	90	350	440
Voc.	145	19	111	14	89	16	345	49	394
Oc.Div.	8	16	7	19	5	12	20	47	67
Ed. Dist.	4	12	10	13	6	16	20	41	61
	352	344	308	349	238	294	898	987	
Total	696		657		532		1,885		1,885

High School Ana Roqué Humacao, P.R.

Instructional Personnel 1971-72

Principal	1
Asst. Principals	2
Counsellors	3
Librarian	1
Registrar	1
Coord. C.C.T.V.	1
Social Work	2
English Teachers	11
Spanish Teachers	11
Science Teachers	8
Mathematics Teachers	6
Social Studies	7
Commerce Teachers	9
Home Economics	1
Industrial Arts	1
Air patrol Teachers	1
Music teacher	1
Physical education	1
Theater	1
Health	2
Trade and Industry	11
Distribution	1
Diversified occupations	1
	85

Teachers with home room	53
Without homeroom	20
Principals	3
Counsellors	3
Librarian	1
Registrar	1
Coord. of C.C.T.V.	1
Social worker	1
Vocation counsellor	1
	85

Classroom teachers	73
Other personnel	12
	85

2. December 12 the validation committee visited the Ana Roqué High School again to continue the validation as planned :

    a. Interviews

        1) a group interview was held with five parents whose children are taking part in the C.C.T.V. project

        The following questions were asked :

            a) Do you know about the C.C.T.V. project?

            b) In your judgment is there any educational value in the project?

            c) Have you observed any conduct change in your child?

        The parents said they knew about the C.C.T.V., project since the beginning. Their opinion is "This project has real educational value, since they see it as a means of self-evaluation, contributing to cultural refinement, broadening the knowledge of the student, influencing their creativity, motivating and encouraging the student." The parents also reported,"Their children in lower grades were interested in actively participating in the project." Also, "They have noticed positive changes in the conduct of their children, there is greater interest in their subjects and in school in general."

2) The validation committee interview nine teachers in the school to get their reactions to the project. Among the questions asked were:

a- have you observed any change in academic achievement in your students? What?

b- how often did you use programs prepared on C.C.T.V.?

c- which subject gets most emphasis in the programs?

d- what innovative impact has the project had on you and on the students?

e- have adjustments been made in the schedule to take care of different groups of students?

f- how is programming provided for groups in different grades and with different interests?

g- what has been your participation in the project?

According to the teachers, positive changes have been noted in student behavior. They show greater interest in their subjects and the school in general, which means better grades. Often the programs supply needs of the students and the school. They are used as a teaching resource, as orientation and training for both teachers and students, as complementary and enrichment materials for teaching and other uses. They cover all subjects but with more attention to Spanish, English, social studies and areas of orientation.

Varying the traditional techniques of the teaching-learning process has allowed this process to reach a greater number of students more effectively and using less time. Changes in the schedule are planned ahead of time by both teachers and students, using free periods and homeroom for professional improvement . Occasionally the teacher provides material as a frame of reference for the production.

There is no production committee as such. Most of the work falls on the C.C.T.V. coordinator.

3) The validation committee then interviewed 10 students from the 30 participating students. Questions asked and replies were:

a- what do you think of the C.C.T.V. project?

b- how has it helped with your classes?

c- what subjects have had greatest emphasis?

Answers were:

1. "This project helps because it is possible to use free periods fully."

2. "They complement and enrich the classes. For example, if you haven't finished reading a book , you can watch and listen to the programs over C.C.T.V.to finish the book."

3) A larger group of pupils can take part, so that what one teacher could do with one group can now be done with more than one group at the same time.

4) They take a more active part when they watch the program in their classroom and express themselves more freely. They don't have to leave the classroom and the program reaches more students.

5) The classes are more enjoyable.

6) As they learn certain materials, they help to prepare the scripts.

7) They keep more interested in school because there is more variety in class presentations.

Note: A tape of this interview is included

3. Documents examined:

The validation committee had a chance to examine the following documents:

a- story of project development
  1- script
  2- videotape
b- charts
c- records of weekly programming
d- records of circulation
e- teachers program
g- records of T.V. program evaluations

f- teacher attendance

h- records of videotape programs

i- records of tapings and reproductions

j- records of dissemination activities

l- catalogues

k- records of requests for services

m- plan of work

VI- Results of validation

A. Achievements identified by the C.C.T.V. Committee and data to support the claims:

1- Instruction is more efficient, productive and varied

2- Curricular programs are enriched

3- Video file created and maintained

4- 20 teachers and 30 students trained

5- Audiovisual materials produced for circulation in classroom and other educational activities.

As for No.1, the validation committee concluded this is too general and would require a study of needs that would show on what situation this achievement was based. No.2 needs to specify which programs, what strategies, what techniques, what there was before and what there is now and what was done to establish a comparative level before and now, etc.

Nevertheless, it should be pointed out that, according to information from the interviews, the orientation program and the subjects of Spanish, English, science and social studies were somewhat enriched, although not in a systematic and organized way as was to be expected.

No. 3 was identified and verified since a small video file has been organized, evidence of which is found in documents we include.

No. 4 could be verified, as the operational level could be observed through interviews with parents, teachers, students and other personnel as well as through a study of documents and case histories.

No. 5 showed a series of materials has been produced: posters, charts, videotapes, diapositives, transparencies, illustrations, drawings, etc.

B. Progress of the clientele:

The validation committee could not identify clientele progress, as there were no comparative tables as evidence of state of clientele before and after the project. Information was available only in connection with what was done at the beginning and during the project.

COST ANALYSIS

Sr. José Santiago	Central planner
Sr. Agustín Herrera Gostá	Regional planner
Sr. Efraín Serrano	Regional planner
Sr. Francisco Cordero Días	Local planner

Cost Analysis

Project #35 C.C.T.V.
Demostration District of Humacao

Items	1970-71	1971-72	Total
1. Professional Personnel			
a. Teacher Coordinator	$ 4,675.00	$ 5,820.00	$10,495.00
2. Non-professional personnel			
a. Teacher aide	____	$ 1,200.00	$ 1,200.00
3. Equipment	$21,412.06	____	$21,412.06
4. Materials	$ 1,408.66	____	$ 1,408.66
5. Room			
a. Room rental	$ 1,800.00	$ 1,800.00	$ 3,600.00
TOTAL COST	$29,295.72	$8,820.00	$38,115.72

Materials Project #35

Materials	Year	Amount	Price	Total
Grillwork, C.C.T.V. room	1971		219.20	219.20
Plastic Screens	"		156.50	156.50
Door window frames 1x3x14	"	56	.70c/u	39.20
Plywood 2x4x14	"	8	1.87c/u	14.96
Decorative panels 1/4 x4x8	"	32	8.50	272.00
Acoustic Panel 1/2x4x8	"	24	6.50	156.00
Main T 12"	"	14	2.00	28.00
Cross T 4"	"	96	.75	72.00
Square T.	"	1	6.50	6.50
Cartabones 30/60°y 45°	"	2	1.50	3.00
Extension Cords 10'	"	3	1.50	4.50
Extension cords 25'	"	5	2.50	12.50
Extension cords 50'	"	1	4.50	4.50
Video heads spin Physics for V.T.R.	3729 3658	2	125.00	250.00
Video head for Ampex	"	1	170.00	170.00
Total				$1,408.66

High School Ana Roqué
Humacao, P.R.

Equipment Inventory

Room #5 Sr. Reinaldo Alvarez

1972 Coordinator

Closed Circuit T.V.

Amount		Property No.	Cost
1	Proyector Bell x Howell 16 mm	172-0694	440.00
[illegible]	Screen Da- Lyte Versatal	169-1751	24.50
1	Filmstrip projector	226-2374	128.00
1	Carousel projector	226-2353	120.37
1	Tape recorder	213-1614	189.50
1	Vertical Projector	127-1428	163.44
1	Recorder player (Webtone Model 175)	300-1548	75.00
2	Projector tables on wheels		63.90
[illegible]	VTR 7100 Console	0002311	8,000.00
1	VTR CH #8 Transmitter	0004279	175.00
1	Jerrold 2880 Broadband Amplifier	0004501	250.00
1	Video-tape Recorder Model 5100	4620	2,000.00
1	Dynair VHF Transmitter	018370	175.00
1	Filing Cabinet Legal size 5 drawer	0004903	61.00
1	Chair Rotary W/arms	0004905	28.00
1	Storage Cabinet for Films	0004907	54.00
1	General Office Desk W/lock	0004910	77.00

Amount		Property No.	Cost
1	Ampex Camera 324 Serial 2228		700.00
2	Tripods		99.90
1	Lavalier Neck Microphone		75.00
1	Smilh Victor Quartz Light Kit	0005103	108.00
1	Air condition	0004183	297.00
1	Zoom lense	0004717	265.00
1	Typewriter Olivetti		235.00
1	Typewriter table		25.00
1	Monitor Ampex	0004252	200.00
1	Flips Stand		25.00
50	Videotapes Wabash		2,425.00
1	Guillotine		20.00
1	Hasky Dolly		29.95
14	Setchel Carson T.V.		4,882.50
	TOTAL		$21,412.06

Appendix No. 2

VALIDATION PROCESS

Check lists

Project Title : C.C.T.V. (#35)

District : Humacao Date: December 13, 1972

Indicate with a check-mark how you would classify the achievement in each one of the following areas using the following scale:

1. nothing achieved
2. unsatisfactory achievement
3. satisfactory achievement
4. good achievement
5. outstanding achievement

AREAS	0	1	2	3	4
1. The strategies used in the project contribute to solve problem (s) identified in the study of needs.		X			
2. The project presents evidence to show the operational objectives were effectively reached.			X		
3. The project presents evidence to show the instruments used provide objective and realiable information.					X
4. The project presents an analysis of cost-effectiveness that reflects a relationship between the costs and the performance of participants.					
5. Analysis of cost-effectiveness indicates the project is practical (The money spent is justified by the product)					
6. The project can be observed both visually and communicably					X
7. The project has concept or practices obviously original, unusual and exemplary				X	

AREAS	0	1	2	3	4
8. The project offers innovative procedures, techniques and practices that can be disseminated					X
9. The project has made a significant contribution to the educational system					X

VIII. Recommendations and general conclusions:

A. It is necessary to make a study of needs, set up priorities, and plan systematically.

b. The guiding committee should be basically academic teachers or at least a majority, so that when the needs study is made it is they who do it in terms of the instructional needs of the clientele so as to enrich the curriculum.

c. There should be more intensive use of C.C.T.V., extending it to other personnel in the district and even the regional office.

d. Insofar as possible there should be more equipment and adequate space provided for installing these facilities.

e. Evidence should be provided on how the school was before the project and afterwards, i.e., the impact on teaching-learning. What impact has it had on the school? What achievement factors improved?

f. C.C.T.V. should be used to the fullest extent; at least to 60% of capacity so as to reach more students.

g. We recommend this project of C.C.T.V., No. 35, be adapted for future consumers, keeping in mind the above recommendations and according to the situation in each school district or particular agency.

PROYECTO #35 C.C.T.V.
SEGUNDA UNIDAD SABANA ENEAS
SAN GERMAN, PUERTO RICO

VALIDATION REPORT

VALIDATION COMMITTEE

Mrs. Enda P. de Negrón-Chairman
Mrs. Lucía Ponce de Cordero-Secretary
Mr. Franklin Ramírez
Mr. Martín Alvarado
Mr. Blackley Rivera
Mr. Cabrera-Evaluation specialist

Commonwealth of Puerto Rico
Department of Education
Superintendent Office of School
Demonstration District

COST ANALYSIS

PROJECT#35

1971-72

Prepared by:

Miss. Hilda Acosta, Regional Planner

Mrs. Concepción Pagán Merheb, Local Planner

VALIDATION REPORT

I. Project No. 35 C.C.T.V., San Germán Demonstration District, Sabana Eneas Second Unit School.

II. Objectives of Project

1. Promote use of C.C.T.V. and studio facilities by teachers students, school authorities and the community.
2. Transfer to videotape material available in the Department of Education to be used by teachers, students and supervisors when needed.
3. Produce a documentary of all activities where C.C.T.V. has been used for use in the Department of Education to promote use of educational technology in our schools.
4. Prepare videotapes in cooperation with supervisors for inservice training and workshops to be offered teachers in the district.
5. Continue working with the teachers in preparation of educational materials to be used with C.C.T.V.
6. Continue inservice training of teachers in use of C.C.T.V. and other technological means.
7. Use C.C.T.V. facilities for individualized instruction.
8. Use C.C.T.V. facilities for cultural and recreational activities offered to the school and community.
9. Plan a series of visits to be made by urban and rural teachers for use of the project.

III. Procedures used in validation

- A. Strategies
  - 1. Techniques and methods used for gathering evidence
    - a. meetings with district personnel
    - b. questionnaires to the following
      - 1. parents
      - 2. teachers
      - 3. students
    - c. interviews with
      - 1. parents
      - 2. teachers
      - 3. students
    - d. conversations with:
      - 1. school principal
      - 2. C.C.T.V. coordinator
    - e. classroom visits
  - 2. Documents examined
    - a. videotapes prepared
    - b. flip cards prepared
    - c. visual aids for use in the classroom
    - d. scripts used in programs transmitted by C.C.T.V.
    - e. cumulative records
    - f. teacher records
    - g. grade books

h. monthly reports of coordinator

i. attendance records of teachers to training sessions in use of educational technology offered by the C.C.T.V. coordinator

j. resume of work done with C.C.T.V.

k. plans of action, 1971-72 and 1972-73

l. reports of students trained in use and management of equipment

m. training for Sabana Eneas Second Unit faculty on C.C.T.V. project

n. reports on teachers trained in use and management of equipment

o. reports on material transmitted over C.C.T.V.

IV. Results of validation

A. Validated achievements during process

1. Enrichment of curriculum

a. Evidence provided us shows there has been increased enrichment of the curriculum is so far as using human resources, preparing news-casts and script, although to a limited extent, and the training of teachers and students in use and management of audiovisual equipment. In all, seven scripts were prepared. News-cast scripts were not available.

We cannot say whether the success attained in this area is what was expected as the objectives are not expressed in an operational and measurable way.

See Appendix No. 1

Table I

Table 2

Table 3

Lists 1 and 2

2. Student leadership

Evidence shows 30 students were trained, of whom five feel capable of operating the C.C.T.V., although information from the teachers and actual observation show only three can do it. The others were trained in other audiovisual techniques (preparation of flip cards, use and management of equipment) and some of these, in turn, trained other students. Results of this training were not evident in the classroom.

See Appendix No. 1

B. Progress of the clientele

A study of cumulative record cards of the 30 students who received training shows that 28 of them lowered their academic average during 1971-72. One kept the same average of 4.00 and the other raised some of his grades.

In visits to Spanish, English or mathematics classes there was no proof of any leadership from the students with the training.

In interviews with a sample of 15 of the trained students, they reported they had used their training in the following situations:

1. Preparing and presenting the news-cast (45 transmissions).

(Other, untrained students also took part in this activity).

2. Showed films in social studies, science and English classes, once in each one. (The same student, Juan Negrón, did all three).
3. Taped music and the reading of paragraphs (done once in an English class).
4. Used of opaque projector for doing projects. (The students could not say how many times they used it, but indicated it was several times). The coordinator has no record of student attendance at the center nor the purposes of attendance.
5. Prepared flip-cards.

Note: We cannot say more accurately the frequency of student participation as there is no record of student attendance at the center nor the purpose of visits.

V. Cost Analysis

See Appendix No. 2

VI. Check List

See Appendix No. 3

VII. Recommendations and general conclusions:

A. Recommendations

1. Quality and condition of equipment being used in the project should be evaluated.
2. A technician for repairing equipment should be available at all times, even though the district has to pay for his services, in order to make repairs more promptly.

3. On transferring a project of this type, the following criteria should be kept in mind in selecting the coordinator:
   a. Classroom experience
   b. Previous training in use and management of C.C.T.V. equipment and other necessary audiovisual equipment for use in educational technology in the classroom.
   c. Preparation in techniques and processes of effective teaching.
   d. In considering a project of this kind, all those concerned should take part in the planning and implementing of the project (school personnel, students and community).
4. The results of the training given teachers and students should be constantly evaluated on the basis of daily work in the classroom.

B. General conclusions:

1. The C.C.T.V. equipment has not worked as expected because of defects. This fact may have limited the results obtained.
2. There is some evidence teachers have been trained in:

Area	No. of sessions	No. of teachers	Length
a. Preparing objectives in operational terms	1	all	1/2 day
b. Use of educational technology as a means of teaching	2	all	1/2 day each
c. Use of different techniques in the classroom	1	all	1/2 day

Area	No. of sessions	No. of teachers	Length
d. Preparation of more effective evaluative instruments	3	all	1/2 day each
e. Use and management of the following audio-visual equipment			
1. tape recorder	1	5	60 mins.
2. opaque projector	1	6	60 mins.
3. vertical projector	1	7	60 mins.
4. 16mm projector	1	6	60 mins.
5. preparation of audio-visual materials such as:			
a. flip cards	?	5	60 mins.
b. flash cards		5	60 mins.
c. scripts		16	1/2 day
d. transparencies		7	1/2 day

3. There is evidence three students can operate the C.C.T.V. system.

4. 30 students received training in some of the following areas:

    1. opaque projector (8 students)

    2. tape recorder (6 students)

    3. script writing (4 students)

    4. prepare flip cards (5 students)

    5. art (10 students)

    (See Appendix No. 1, Table 3)

5. Relationship between academic achievement, as shown on cumulative record cards, and training received by the 30 students is negative. We cannot conclude the lowered academic average is due to C.C.T.V., as there may have been other factors affecting the situation

    See Appendix No. 4

6. Had the C.C.T.V. equipment been operating normally we believe it would be possible in the future to transfer strategies and processes used, even though limitedly, such as: training of teachers and students in use and management of equipment, preparation of materials and programs, and use of students as resources in C.C.T.V. and the classroom.

   Dates the C.C.T.V. was in operation:
   November to December 1971
   January to May 1972
   Equipment was repaired 7 times

7. On three visits to Mathematics, Spanish and English classes, there was no evidence of the teacher's using the trained students.

8. Interviews with three teachers of mathematics, Spanish and English revealed that, as a result of the training, only the English teacher had used the C.C.T.V. system.

9. Interviews with students imply the teachers are not using effectively in the classroom the training the former had received.

   (See Appendix No. 5)
   Questionnaire 1-2 (A-B-C) - 3

10. Interviews with eight teachers leads to the conclusion they are not satisfied with the conditions of C.C.T.V.

11. Interviews with the teachers indicate they need to coordinate their efforts better to get effective use from the C.C.T.V.

    See Appendix No. 5
    Questionnaire No. 4

12. The C.C.T.V. coordinator had to be given inservice training. This situation limits the degree of success of the project.

Appendix 1

Table 1

Commonwealth of Puerto Rico
Department of Education
Project #35 C.C.T.V.
S. U. Sanana Eneas
San Germán, Puerto Rico

1971 - 72

Activities over C.C.T.V.

Title	Recording	Offered by	Level	Length
Mothers Day	Video Tape	Teachers and mothers of the community	Elementary and Junior	60 minutes
Lecture on highway safety	Video Tape	Mr. Santos Jusino	Elementary and Junior	60 minutes
Lecture on drug addiction	Video Tape	Sergeant Luis A. Nieves	Junior	60 minutes
Demonstration class in English VI grade	Video Tape	Miss. Asunción Toro	Faculty	45 minutes
Hepatitis - Symptoms	Video Tape	Miss. Virgen Lugo	Elementary and Junior	45 minutes
The bee-social insect	16 mm.	Educational Resources Center	Elementary and Junior	20 minutes
The cell	16 mm.	Educational Resources Center	Elementary and Junior	20 minutes

Appendix 1

Table 2

Skill training of S.U. Sabana Eneas
Project #35 C.C.T.V.

1972 - 73

PRODUCTION OF MATERIALS

Opaque projector	Overhead projector	16 mm. projector	Flash card production	Programs presented by
Olga Cruz	Irma Granado	Rubén Flores	Pedro Torres	Luis Castro
Asunción Toro	Beda Torres	Olga Cruz	Luis Castro	Alfredo Granado
Elizabeth Rivera	Asunción Toro	Luis Castro	Alfredo Granado	Pedro Torres
Eda Santiago	Irma Rodríguez	Carmen Figueroa	Carmen Calderón	Irma Rodríguez
Carlos Flores	Alfredo Granado	Carmen Calderón	Virgen Lugo	Rubén Flores
Clara Vargas	Carmen Figueroa	Elizabeth Rivera		
	Clara Vargas			

Appendix 1

Table 3

Commonwealth of Puerto Rico
Department of Education
Superintendent Office of Schools
San Germán, Puerto Rico

Report on students trained in the use and management of audiovisual equipment

Project #35 C.C.T.V.

1971 - 72

C.C.T.V.	Opaque Projector	Art	16 mm. film projector	Writing scripts	Flip-card production
Juan Negrón	Kelly Figueroa	María Morales	Ferdinand Feliciano	Iraida Cancel	Madeline Rosad
Daniel Hernández	Frank A. Ortiz	Miriam Pacheco	Iraida Cancel	Miriam Pacheco	Aida Ortiz
Elvin Sorrentini	Blanca Acosta	Gloria Santiago		Isidora Ortiz	María Rivera
	Ramón Ramos	Johany Vargas		Lizette Rivera	Elizabeth Lugo
	Juan Cruz	Natividad Mercado			Isacc Mercado
	Luis Vázquez	Jackson Rosado			
	Isacc Mercado	Rosalie Martínez			
	Aida L. Ortiz	Rita Pabón			
		Elizabeth Lugo			
		Carmen Aponte			

Title	Recording	Offered by	Level	Length
Reptiles and their characteristics	16 mm.	Educational Resources Center	Elementary and Junior	20 minutes
Life cycle of the butterfly	16 mm.	Educational Resources Center	Elementary and Junior	20 minutes
Flight to the moon (Part I)	filmstrips		"	10 minutes
Area and Shape (Part I) Geography of P. R.	filmstrips		"	10 minutes
Flight to the Moon (Part II)	filmstrips		"	10 minutes
Where we are located (Part II)	filmstrips		"	10 minutes
Climate (Part III)	filmstrips		"	10 minutes
Sammy Mouse	filmstrips		Elementary	10 minutes
Structure of Newspaper	filmstrips		Junior	10 minutes
Phonics: A Key to Better Reading				
1. Help yourself Read	filmstrips		Junior	10 minutes
2. Test yourself on sounds	filmstrips		Junior	10 minutes
3. Let's Start with Key words	filmstrips		Junior	10 minutes
4. Vowel sounds help you	filmstrips		Junior	10 minutes
5. Your eyes and ears are good helpers	filmstrips		Junior	10 minutes
6. Make words work for you	filmstrips		Elementary and Junior	10 minutes

Appendix 1
List 1

Project #35 C.C.T.V.
Second Unit Sabana Eneas
San Germán, P. R.

RESUME OF WORK ON C.C.T.V.

I. Videotapes

1. Youth facing the World
2. School Newscast-Written and Read in Spanish Junior School
3. Lecture: Traffic Safety
4. Lecture-Joseph Torres - F.A.A.
5. Lecture: Drug Addiction
6. Mysterious Person - Dr. Mellado
7. Lecture: Hepatitis
8. Christmas
9. Demonstration class in English
10. Mothers Day
11. Emphasizing pronunciation - English
12. Documentary on C.C.T.V.

II. Scripts

1. Hepatitis by Virgen Lugo
2. English class-Asunción Toro
3.
4. Maricao nurseries-Olga Cruz
5. Student training - 25
6. Services of the Guidance Program
7. Problems solving - 5th and 6th grades

III. Other productions

1. Flip cards
2. Diapositives-prepared by C.C.T.V. Coordinator
3. Posters-Students and teachers
4. Material for bulletin board
5. Material for students to use in projects

Commonwealth of Puerto Rico
Department of Education
Superintendent Office of Schools
San Germán, Puerto Rico

Faculty training at Sabana Eneas S.U.
Project #35 C.C.T.V.
1971 - 72

Teachers trained to write scripts

1. Carmen Figueroa
2. Carlos Flores
3. Irma Rodríguez
4. Nelly Vélez
5. Eda Santiago
6. Asunción Toro
7. Virgen Lugo
8. Carmen Calderón
9. Olga Cruz
10. Irma Granado
11. Luis Castro
12. Elizabeth Rivera
13. Alfredo Granado
14. Pedro Torres
15. Beda Torres
16. Clara Vargas

Appendix 4

Project #35 C.C.T.V.
Second Unit Sabana Eneas
San Germán, P.R.

Comparison of student academic achievement in 1970-71 and 1971-72 in terms of grades

	Elementary School English			Grades 2 to 6 Spanish			Mathematics		
Grade	−	=	+	−	=	+	−	=	+
02	9	20	7	9	23	4	6	23	7
03	16	17	1	20	12	2	12	20	2
04	4	16	19	18	18	3	8	28	3
05	8	25	1	8	25	1	6	21	7
06	14	28	18	17	33	10	16	32	12
	51	106	46	72	111	20	48	124	31
	25%	52%	23%	35%	55%	10%	24%	60%	16%

171	pupils of 609 dropped in academic achievement	28%
341	pupils of 609 remained the same	56%
97	pupils of 609 raised their academic average	16%

Note: We could not conclude there was any direct relationship between C.C.T.V. and grade averages because of so many factors affecting academic achievement.

Cost Analysis

Project #35 - Closed Circuit Television

1971-72

	CONTRACT			SALARIES				
Components	No.	Part	Full	Regular Program	Title III	Others	Time on project	Cost to project 1971-72
I. Personnel								
A. Instructional								
1. School principal	1		X	$ 8,340.00			5%	$ 417.00
2. Coordinator C.C.T.V.	1		X		$5,520.00		100%	5,520.00
3. Teachers	19		X	121,920			5%	6,096.00
5 at $585.00 2 at $560.00 4 at $540.00 2 at $535.00 2 at $510.00 2 at $484.00 1 at $460.00 1 at $435.00								
4. Librarian	1		X	7,020			5%	351.00
5. Vocational guidance	1		X	7,920			5%	396.00

Components	No.	Part	Full	Regular Program	Title III	Others	Time on Project	Cost to project 1971-72
B. Other								
1. School Superintendent	1		X	$ 10,620.00			2%	$ 212.40
2. Asst. Superintendent	1		X	9,120.00			3%	273.00
3. Asst. Superintendent D.D.	1		X		$ 370.00		10%	370.00
4. Regional Planner	1		X		1,020.00		10%	1,020.00
5. Local Planner	1		X		900.00		10%	900.00
C. Classified personnel								
Janitor	1		X	3,120.00			5%	156.00
Total A ⌿ B ⌿ C				7,810.00				15,712.00
D. Fringe benefits								
1. Instructional								
Bonus 4%				6,129.60	312.40			609.04
Retirement 8.5%				13,025.40	663.85			1,294.21
State Insurance fund 1%				1,532.40	78.10			152.26
2. Classified								
Bonus 4%								6.24

	CONTRACT			SALARIES				
Components	No.	Part	Full	Regular Program	Title III	Others	Time on Projects	Cost to project 1971-72
Retirement 5.5%								8.58
Social Security 5.2								8.11
State insurance fund 1%								1.56
Total Fringe benefits				21,177.24				2,080.00
E. Health services								
$7.00 ea.				2,016.00	448.00			448.00
Totals A / B / C / D / E					9,322.35			18,240.00

II. Equipment	No. Units	Unit Price	Total Cost	Useful Life	Depreciation	Actual Value
A. Project #35						
Dyasir VHF Transmitter ch. #10	1 ea.	$ 50.00	$ 50.00	5	$ 25.00	$ 25.00
Jerrold 4-way splitter md. 151	2 ea.	20.00	40.00	5	20.00	20.00
VTR 7 500 Ampex serial #3971	1 ea.	4,095.00	4,095.00	7	2,000.00	2,095.00
Filing Cabinet legal size, w/lock 5 drawers	1 ea.	61.00	61.00	12	30.00	31.00
Chair rotary w/arms	1 ea.	28.00	28.00	10	10.00	18.00
General office desk w/lock	1 ea.	77.00	77.00	10	20.00	57.00
Shibaden zoom lens, 66 mm, F/1.8 Model Z 6618, Sr. #68999	1 ea.	250.00	250.00	5	150.00	110.00
Flip-card stand (1)	1 ea.	50.00	50.00	12	10.00	40.00
Air conditioner model 1970-Fedders	1 ea.	249.00	249.00	4	100.00	149.00
Cabinet for equipment CCTV	1	50.00	50.00	10	10.00	40.00
Table, gray metal	1	39.50	39.50	20	10.00	29.50
Ampex Tape Recorder #0004271	1	195.00	195.00	6	100.00	95.00
Ampex camera outfit V/Triped, microphone, supplycord	1	700.00	700.00	5	400.00	300.00
Ampez monitor V.E. #0004273	1	200.00	200.00	7	110.00	90.00
Master antena #0004273	1	100.00	100.00	7	40.00	60.00

	No. Units	Unit Price	Total Cost	Useful Life	Depreciation	Actual Value
Master antena #0004273	1	100.00	100.00	7	40.00	60.00
Oscilloscope Welch #3456	1	100.00	100.00	7	50.00	50.00
Desk	1	77.00	77.00	12	50.00	27.00
Wall clock #0006167	1	50.00	50.00	200	20.00	30.00
Easel display #0001330	1	30.00	30.00	10	20.00	10.00
Table, gray metal	1	100.00	100.00	10	25.00	75.00
Videotape 1 hrs.	25	1.10	27.50	5	5.50	22.00
Videotape 2 hrs.	25	1.10	27.50	5	5.50	22.00
Typewritter Olivetti #0004139	1	150.00	150.00	5	25.00	125.00
Folding chairs	20	15.00	300.00	15	100.00	200.00
Taperecorder-Wollensak-0002484	1	195.00	195.00	5	95.00	100.00
Taperecorder-Sony #0002477	1	177.95	177.95	5	100.00	77.95
Carrousel	1	180.00	180.00	6	100.00	80.00
Carrousel	1	180.00	180.00	7	100.00	80.00
Projection table	6	34.95	209.70	5	15.00	119.70
Screen	1	51.75	51.75	5	25.00	20.00

	No. Units	Unit Price	Total Cost	Useful Life	Depreciation	Actual Value
16 mm. reels	3	.75	2.25	6	.25	.50
Carrousel programmer -#0002544	1	44.40	44.40	5	25.00	20.00
Filmstrip Graflex #0002542	1	680.00				
Projector Graflex 16mm #0002480	3	600.00	1,800.00	6	300.00	1,500.00
Projector Opaque #0001068	1	345.00	345.00	7	150.00	100.00
Overhead projector #0002441	1	270.00	270.00	4	170.00	70.00
Projector 16mm Graflex #0002530	1	600.00	600.00	6	300.00	200.00
Camera	1	300.00	300.00	6	100.00	200.00
B. Equipment						
Regular Program						
Televisions	7	225.00	1,575.00	5	150.00	1,075.00
			3,004.65		4,816.00	7,838.65

III. Materials

A. Project Materials

1. Installation

	No Units	Unit Price	Total Cost
Wire Beldon 20	100 ft.	8.28	$ 828.00
Plugs Switcheraft A3M	2 ea.	2.10	4.20
Adapters Switcherft 2120	1 ea.	1.30	1.30
Plugs Switcheraft #280	3 ea.	1.10	3.90
Plugs Switcheraft #3502	4 ea.	0.55	2.20
Adapters Switcheraft #3503	2 ea.	0.65	1.30
Jacka Switcheraft #531	2 ea.	0.40	0.80
Play Switcheraft 2531	1 ea.	0.75	0.75
Kinge UC - 525	3 ea.	0.74	2.22
Kinge KC-59-79	10 ea.	1.05	10.50
Kinge KC-59-44	50 ea.	0.55	27.50
Alco Switch MSTA - 3060	1 ea.	5.25	5.25
Alco Switch MSTA - 20614	1 ea.	2.99	2.99
Glarostat pets A-47 1OX-R S	4 ea.	1.62	6.48
Nobies Alco KMS-501B	4 ea.	1.25	5.00
Resistor 47K 1/2 W.	2 ea.	0.12	0.24
Chasis LMB	1 ea.	1.25	1.25
2. Office			
Films 20 exp. with processing	12 rolls	4.37	52.20
Magic Markers asst colors	144	0.09	12.96
Tempera asst colors	33	0.30	9.90
Pencils, for glossy surface mark	1 doz.	1.00	1.00
Rubber cement	24 bt.	0.15	3.60
Paper mimeograph 8 1/2 X 14"	20 rm.	0.90	18.00
Paper lens, 7" x 11" heavy weight	14 pg.	0.35	4.90
Brush Artist	20 ea	0.16	3.20
Brush Artist	10 ea.	0.29	2.90
Brush Artist	10 ea.	0.11	2.40
Brush Artist	10 ea.	0.18	1.80
		TOTAL	$1,016.54

IV. Other student services

Scholarships	16	$ 300.00
Transportation	176	6,336.00
School lunchroom	408	30,192.00
		$36,828.00

Resume - Cost Analysis

Project # 35 | 1971 - 72

Components	Title III	Regular Program
Personnel	9,312.35	8,441.65
Equipment and maintenance	11,429.65	1,575.00
Materials	1,016.54	-
Other student services	-	36,828.00
TOTAL	21,758.54	46,844.65
Enrollment:559		
Average per student regular program	83.80	
Average per student Title III funds	38.92	
Average funds, combined funds	122.72	
Average per student, allowing for depreciation	24.83	

Project #35 - Closed Circuit Television

ITEM	BUDGET	ACTUAL COST
A. Personnel		
1. Coordinating teacher	6,840.00	5,520.00
B. Fringe Benefits	1,026.00	745.20
C. Materials	500.00	
D. Maintenance	500.00	11,429.00
	8,866.00	17,694.20

VALIDATION PROCESS

Check Sheet

Title: #35 C.C.T.V.

District: San Germán Date: December 7, 1972

I. Indicate by a check mark in the proper column your rating of each area according to the scale:

0 - Nothing at all

1 - Unsatisfactory

2 - Satisfactory

3 - Outstanding

4 - Excellent

Areas	0	1	2	3	4
1. The strategies used in the project contribute to solve problem(s) identified in the study of needs		x			
2. The project presents evidence to show the operational objectives were effectively reached		x			
3. The project presents evidence to show the instruments used provide objective and realiable information				x	
4. The project presents an analysis of cost-effectiveness that reflects a relationship * between the costs and the performance of participants					
5. Analysis of cost-effectiveness indicates the project is practical * (The money spent is justified by the product)					

Areas	0	1	2	3	4
6. The project can be observed both visually and communicably	x				
7. The project has concept or practices obviously original, unusual and exemplary			x		
8. The project offers innovative procedures, techniques and practices that can be disseminated			x		
9. The project has made a significant contribution to the educational system	x				

* Depends on final cost-effective analysis, which is not completed

II. Explain your rating

The project, although limited by operational problems with equipment, offers the necessary objective evidence to permit identification of certain elements that can be transferred to other schools. Objectives are not stated in operational terms, which prevents determining the actual degree of success.

Project #35 C.C.T.V.
Second Unit Sabana Eneas
San Germán, P.R.

Comparison of student academic achievement, 1970-71 and 1971-72 in terms of grade averages

Junior high - grades 7 to 9

	English		Spanish		Mathematics	
Grade	1970-71	1971-72	1970-71	1971-72	1970-71	1971-72
7th	2.42	2.32	2.16	2.08	2.20	1.82
8th	1.48	1.49	2.46	2.33	2.50	1.83
9th	2.24	1.85	2.21	2.07	2.55	2.02

Observations:

1. No progress in academic achievement
2. No change in failures and dropouts
3. The Puerto Rican General Ability Test, given in January 1972

   Give the following results:

   0-25 (1-c) 34%

   26-50 (2-c) 34%

   51-75 (3-c) 23%

   75 ó + (4-c) 9%

4. Results of tests given by the Evaluation Office show the school falls below the established norms.

Questions used in interviews with 15 students trained by the C.C.T.V. Coordinator

1. For what did you use opaque projector?

2. How has the tape recorder helped the English class?

3. What films have you seen in the classroom?

   On what topics?

4. For what were the scripts prepared?

5. The script includes what parts?

6. Have you helped prepare scripts?

7. What is the difference between closed circuit television and open circuit?

8. What advantages do you find in teaching by T.V.?

Questionnaire 2A

Project #35 - Closed Circuit
Television
Sabana Eneas, San Germán, P. R.

Tabulation of students trained by C.C.T.V. Coordinator

Student Questionnaire

1. The Closed Circuit Television project was set up in this school in 1970-71.

   What did you know about closed circuit television before this project began?

   a. A great deal ____________
   b. Little ____________
   c. Nothing____________

2. Who interested you in this project?

   a. Principal ____________
   b. Coordinator____________
   c. Teacher ____________
   d. Student ____________
   e. Someone else ____________

3. Have you had training in handling C.C.T.V. equipment?

   a. A great deal____________
   b. Little ____________
   c. None ____________

4. Do you feel capable of running a C.C.T.V. system without the help of the Coordinator?

   Yes__________ No __________

5. Have you helped produce programs televised over C.C.T.V.?

   a. Frequently__________
   b. Often__________
   c. Seldom__________
   d. Never__________

6. With which of these subjects have you helped most in C.C.T.V?

   a. Spanish____________
   b. English____________
   c. Mathematics ____________

7. How much do you think C.C.T.V. has helped you improve your grades?

   a. Great deal __________
   b. Little __________
   c. None __________

8. How do you rate the classes where C.C.T.V. has been used as compared to those not using it?

   a. Superior____________
   b. Good____________
   c. Average____________
   d. Unsatisfactory__________

9. To what extent would the use of C.C.T.V. be helpful in teaching the different subjects?

   a. all__________
   b. some__________
   c. None__________

Questionnaire 2B

Project #35 - Closed Circuit
Television
Sabana Eneas, San Germán, P.R.

Student Questionnaire

Tabulation-Questionnaire to students trained by other students

1. The Closed Circuit Television system was set up in this school in 1970-71.

   What did you know about C.C.T.V. before this project began?

   a. Great deal ____________
   b. Little ____________
   c. Nothing ____________

2. Who interested you in this project?

   a. Principal ____________
   b. Coordinator ____________
   c. Teacher ____________
   d. Student ____________
   e. Someone else ____________

3. Have you had training in handling the C.C.T.V. equipment?

   a. Great deal ____________
   b. Little ____________
   c. None ____________

4. Do you feel capable of operating a C.C.T.V. system without help from the Coordinator?

   Yes ____________ No ____________

5. Have you helped to produce programs shown over C.C.T.V?

   a. Frequently ____________
   b. Often ____________
   c. Seldom ____________
   d. Never ____________

6. With which of these subjects have you helped most over C.C.T.V.?

   a. Spanish ____________
   b. English ____________
   c. Mathematics ____________

7. To what extent has C.C.T.V. helped you improve your grades?

   a. Great deal ____________
   b. Little ____________
   c. None ____________

8. How do you compare the classes using C.C.T.V. with those not using it?

   a. Superior ____________
   b. Good ____________
   c. Average ____________
   d. Unsatisfactory ____________

9. To what extent would C.C.T.V. be helpful in teaching the different subjects?

   a. All ____________
   b. Some ____________
   c. None ____________

Questionnaire 2C

Project #35 - Closed Circuit
Television
Sabana Eneas, San Germán, P. R.

Tabulation - Questionnaire to 10 untrained students

Student Questionnaire

1. The Closed Circuit Television system was set up in this school in 1970-71.

   What did you know about C.C.T.V. before this project began?

   a. Great deal ____________
   b. Little ____________
   c. Nothing ____________

2. Who interested you in this project?

   a. Principal ____________
   b. Coordinator ____________
   c. Teacher ____________
   d. Student ____________
   e. Someone else ____________

3. Have you had training in handling the C.C.T.V. equipment?

   a. Great deal ____________
   b. Little ____________
   c. None ____________

4. Do you feel capable of operating a C.C.T.V. system without help from the Coordinator?

   Yes __________ No __________

5. Have you helped to produce programs shown over C.C.T.V.?

   a. Frequently ____________
   b. Often ____________
   c. Seldom ____________
   d. Never ____________

6. With which of these subjects have you helped most over C.C.T.V.?

   a. Spanish ____________
   b. English ____________
   c. Mathematics ____________

7. To what extent has C.C.T.V. helped you improve your grades?

   a. Great deal ____________
   b. Little ____________
   c. None ____________

8. How do you compare the classes using C.C.T.V. with those not using it?

   a. Superior ____________
   b. Good ____________
   c. Average ____________
   d. Unsatisfactory ____________

9. To what extent would C.C.T.V. be helpful in teaching the different subjects?

   a. All ____________
   b. Some ____________
   c. None ____________

QUESTIONNAIRE 3

Questionnaire to parents of students receiving the direct effect of the project.

We appreciate all the cooperation we have received for improvement in use of the C.C.T.V. in the Second Unit.

Check with an x your choice or choices of answer for each question.

1. Do you know about the use of C.C.T.V. that is in operation in the Sabana Eneas Second Unit?

   Yes_____ No____

2. In what way, or ways, did you learn about the fact of the C.C.T.V. project?

   / / Visiting the school / / Told by my children

   / / Helping with school programs

   / / Going to televised activities offered us parents

3. To what extent do you think this project has helped to improve the work of your children in the school?

   / / Great deal / / Not at all

   / / Little / / Don't know

4. Have any of your children had problems with writing or reading Spanish?

   / / Yes / / No

5. Do you think he/she has improved in writing or reading Spanish?

   This was not used.

6. Have any of your children taken part in televised activities at the school?

   / / Frequently / / Very little

   / / Occasionally / / Never

   / / Don't know

7. In what class programs have they taken part?

☐ Drama (Theater)
☐ Health
☐ Music (Chorus)
☐ Newscasts
☐ None

8. Have you been invited to any televised program at the school?

☐ Yes
☐ No

9. Have you attended any televised program at the school?

☐ Yes
☐ No

10. Have you taken part in any televised program at the school?

☐ Yes
☐ No

QUESTIONNAIRE 4

Questionnaire to interviewed teachers:

1. Did you receive training during 1971-72 for use of C.C.T.V. equipment?

   ☐ Great deal ☐ Little ☐ None

2. Did you receive inservice training during the year over C.C.T.V.?

   ☐ Yes ☐ No. If yes, What training?

   ____

   ____

   ____

   (See list of kinds of training and teachers trained)

3. Do you have television in your classroom? ☐ Yes ☐ No.

4. Did you use other materials in your classes prepared by the audiovisual teacher? ☐ Yes ☐ No. If yes, what were they?

   ____

   ____

   ____

5. Did you help to prepare audiovisual materials? ☐ Yes ☐ No.

   What?

   ____

   ____

   ____

6. Do you think the students have improved their grades because of the C.C.T.V. ☐ Yes ☐ No. What evidence do you have?

   Profiles________, tests_______, records _______

7. What other changes in conduct have you noted in the students as a result of using materials and equipment of C.C.T.V.?

Specify:

8. Did you use the students who received training in operating C.C.T.V. equipment or in preparing materials? / /Yes / /No. How?

9. Do you believe the students and teachers who were given training could use the skills and knowledge they learned in managing the C.C.T.V. without direct supervision of the audiovisual teacher?

/ /Yes / /No. How?

10. What new techniques were practiced through the use of C.C.T.V. in your opinion? (See the list of techniques)

11. What curriculum changes were added to the regular program at the school?

12. Do you consider the techniques used were the most effective for achieving the objectives of the project? / /Yes / /No.

13. Do you think the same goals would have been reached without C.C.T.V.?

/ /Yes / /No.

14. What changes would you suggest for better use of C.C.T.V.?

____

____

____

General Conclusions:

Based on the information supplied by the district and that secured by us through the different instruments used and already indicated, we conclude that the C.C.T.V. up to now has not functioned effectively. There are many factors, which we have pointed out, that can have limited its effectiveness. At the moment we do not believe it advisable to transfer the project or any of its components.

EVALUATION REPORT

PROPOSAL # 59 (72-13) PROPOSAL TO ESTABLISH A SPORTS AND GAMES CENTER IN THE LEVITTOWN HIGH SCHOOL

TOA BAJA, PUERTO RICO

Mr. José Seda, Consultant
Physical Education Program

667

April 18, 1973

MEMORANDUM

TO : Mr. Efraín Otero, Director
Physical Education Program

FROM : José Seda, Consultant
Physical Education Program

RE : VISIT TO LEVITTOWN SENIOR HIGH SCHOOL
IN CONNECTION WITH PROJECT #59, 1972-73

My reaction to the visit we made to the Levittown Senior High School on the Project of the Sports and Games Center is as follows :

1. There is certainly genuine interest and enthusiasm in the community for the sports activity.
2. There is obvious interest in and wish to cooperate with the school.
3. The high school principal is fully aware of and clearly enthusiastic about the program of physical education in which she is fully involved.
4. The student body is interested in participating in sports and is crying for more such activities and more competition.
5. The physical education program is being affected by the problem of relations between that teacher and Prof. Meaux, whom he recommended to help with field and track sports.

6. My impression is that Prof. Meaux's duties are not well defined, as they should be by the physical education teacher who is, in the final analysis, the person responsible for the program.

7. It also seems that Prof. Meaux and Prof. Coello go each his own way with no attempt or disposition to find a common meeting point to iron out their problems and reach the understanding there should be between the person cooperating and the one with whom he is cooperating.

8. The physical education teacher has left the way open for Prof. Meaux to take over all competitive sports in which the students take part, so that the latter has gained the affection and confidence of the students.

9. There are sports-recreation groups who are all interested in the same thing, i.e., to cooperate in developing sports in the school and community. Along this line I would point out that in conversation with the group backing Prof. Coello, they showed themselves ready to join the other group and all become one single group.

10. Delivery of materials and equipment has been slow and delayed the development of the project. For this reason I recommend :

    a. A meeting be held with the principal, the physical education teacher, Prof. Meaux and representatives of the Physical Education Program.

b. Another meeting be held with the two groups, the principal and representatives of the Physical Education Program.

LEVITTOWN SPORTS COUNCIL

Committee of Sports Leaders

Questionnaire for interview of project leaders for the Annual Report.

Date April 10, 1973

Name of leader or person in charge of project Mrs. Alba Rolón de Martínez

Name of project Games and Sports Center, Levittown Senior High School

No. of project 59 (72-13)

Telephone ________

1. To what extent have the project achievements been attained?

a.	were all objectives attained	
b.	were most of the objectives attained	
c.	were half of the objectives attained	
d.	were some	X
e.	were none	

A. If any objective was attained, which

#2 of the proposal

#3 (to be examined further)

2. Has there been any difficulty or problem that affected functioning of the project?

Yes X

No ________

A. If the reply is yes, indicate what and how the project was affected:

1. Failure or delay in delivery of equipment

2. Lack of communication with the offices concerned

3. Strained relations with the physical education teacher

B. What do you recommend to solve the problem or difficulty?

See page 2 (a-b)

Yes ____________ No ____X____

A. If the answer is "yes" what has been the change?

B. What caused the change?

C. In your opinion, what effect has this change had on the project?

4. Have parents, guardians and other community members cooperated with the project?

Yes ____X____ No ____________

A. If your answer is "yes" who have helped?

Parents or guardians __X__ Others of the community __X__

B. To what extent have they cooperate, using scale :

	Much	Sufficient	Little
Parents or guardians		X	
Others of the community			

5. If there has been cooperation, describe the most outstanding examples:

1. Regular meetings every Wednesday
2. Baseball game between students and community members

3. Parent cooperation with school activities

6. Some projects have teacher aides assigned. Did this project have this service?

Yes ____X____ How many ____2____

No ____________

A. If there were aides, did they have any kind of training?

Yes ____________

No____X____

B. If there was training, what kind was it?

Formal ____________

In-service ____________

C. How many teacher aides received training?

____

D. List the training activities with a brief description

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

E. Describe a special example of the training activities

EXTERNAL EVALUATION REPORT

CLOSED CIRCUIT TELEVISION - 2500 M H Z

PROJECT # 77 (72-31)

674

Project #77 (72-31) C.C.T.V. - 2500 MHz
MNA area (Model City) San Juan, P.R.

Submitted by: Margarita Guillot

675

EXTERNAL EVALUATION

Title of Project: Project #77(72-31) C. C. T. V. 2500 MHZ

Project Director: Srta. Awilda Ramírez

Budget: $182, 664 (Title III)

Project Period: August 1972 (From) May 1973 (To)

Target Population: 11 schools of the Model City Area. San Juan, P. R.

300 MNA teachers from K-9 grades

6, 328 MNA students from K-9 grades

On-site Visit Dates: April 26, 1973 (From) April 27, 1973 (To)

External Evaluator: Margarita Guillot (Signed)

PART II

INSTRUCTIONS

1) In the following questionnaire your are asked to give one or two word responses to the questions. Please try to be as precise and incisive as possible. It may be helpful for you to keep in mind the following basic categories, but do not feel constrained by them:

(4)	Excellent; first rate performance; to a large degree
(3)	Good; satisfactory performance; to an acceptable degree
(2)	Fair; limited performance; to a limited degree
(1)	Weak; unsatisfactory or inadequate performance; hardly at all
(0)	Could not be observed
-	Not applicable

2) Some responses request a short written statement based on your own understanding of the project.

EVALUATION QUESTIONNAIRE

Project [illegible] (70-71) [illegible] Date [illegible] 26, 197[illegible]
[illegible] (Model Cit[illegible] San Juan, P.R.

Section I. General

1) To what extent does the project implement the following general concepts?

a. Individualized instruction see comments

b. Community involvement " "

c. The relationship of learning to the students' total living experience i.e. does the project relate meaningfully to the problems and experiences the students meet daily outside the classroom? " "

d. Fosters and/or demonstrates new roles for teachers which emphasize the learning process of the individual? " "

2) How great a contribution does (or can) the project make to education in Puerto Rico? That is, what degree of impact on education in the state does (or can) this program have? an excellent contribution
4

3) Based on your knowledge of education in Puerto Rico, would you say that this project demonstrates "creative" and "innovative" responses to educational problems? "creative" and "innovative" 4

4) How great are the possibilities of transplanting the program in another school or area? excellent possibilities
4

5) To what extent do you feel the students' behavior and/or academic performance have probably improved since the beginning of the project? (Based on a. comments from student and staff in the project, b. comments from teachers, etc., who are not directly involved in the project and c. your observations of evaluation data collected by the staff.) see comments

6) To what extent are students in the project enthusiastic about the project? " "

7) What do you infer to be students' general attitude toward project staff?

OBJECTIVES	ACTIVITIES TO ACHIEVE OBJECTIVE	SUCCESS IN ACHIEVING OBJECT
I. The use of C.C.T.V. aims:		
1.1. To provide better educational facilities in the eleven schools of the Model City Area.	1.1. The teachers of the eleven schools of the MNA area will have, by using C.C.T.V., the opportunity of using the best educational facilities in their classrooms.	1.1. The presentation of the material taught can be diversifie to benefit the learning capacity of students.
1.2. To reduce the present cost of instruction.	1.2. C.C.T.V. will cover a large, over populated area in San Juan, which otherwise would not have enough schools.	1.2. The C.C.T.V. 2500 MHz is built to cover a larger area than the one planned for.
1.3. To increase the proficiency of students in the study of languages, mathematics, sciences, and social studies.	1.3. Through adequate use of C.C.T.V. more material can be taught in English, Spanish, Mathematics, Sciences, and Social Studies.	1.3. It is expected, from the data gathered in similar schools that the proficiency of the students will increase during the school year by at least two levels.
1.4. To coordinate the curriculum content.	1.4. The curriculum, using C.C.T.V., can be planned, to be diversified and to use the maximum educational background of the faculty.	1.4. A better curriculum can be offered to students.
1.5. To help the teaching-learning process in schools with double enrollment.	1.5. The project presented in C.C.T.V. can be used by all teachers in schools with double enrollment as many times as needed.	1.5. All students will benefit from the educational materials presented.
1.6. To bring into all classrooms people, resources, and materials which could be impossible to bring on a separate basis.	1.6. C.C.T.V. offers the opportunity of gathering in one place the best resources and people to produce a program which can be difused over all the schools of the MNA area.	1.6. All the students will benefit from these programs that otherwise could not be presented to each of the eleven schools.

OBJECTIVES	ACTIVITIES TO ACHIEVE OBJECTIVE	SUCCESS IN ACHIEVING OBJECTIV
1.7. To correlate subject matter of the units with other subjects.	1.7. C.C.T.V. offers the opportunity of using teachers of different subjects in team teaching or other arrangements.	1.7. Students will benefit by studying a unit in a given subject coorelated with other subjects.
1.8. To direct activities toward specified learning outcomes.	1.8. By using C.C.T.V. 300 teachers can plan their units in subjects taught with the same specified learning goals.	1.8. All the students of the area will get the same benefits from well planned instruction.
1.9. To provide for in-service training for teachers.	1.9. C.C.T.V. will be used in seminars, lectures, meetings, etc. to increase the professional capacity of teachers.	1.9. Teachers will benefit from the use of C.C.T.V. by acquiring the latest concepts in educational technology.
1.10. To provide individualized instruction.	1.10. Special programs and activities for students of a particular age or grade grouping can be presented. Students can advance at their own learning capacity with adult guidance.	1.10. C.C.T.V. will offer the opportunity for education at individual level, slower or accelerated, single or by groups, to benefit the majority of the students.

COMMENTS:

Section 1.

a. and b. - Project #77 (72-31) C.C.T.V.

1. Has not been able to start transmitting to the eleven schools in the area.

   c. and c - There is evidence of several meetings that were held with the third grade and seventh grade teachers, advisors and coordinators to plan work.

2. Education in Puerto Rico can benefit greatly from the use of C.C.T.V. especially in an area such as this one where the socio-economic level is below average.

3. Judging from the objectives and the meetings held this project demonstrates "creative" and "innovative" responses to educational problems.

4. This project may transplant its program in another school or area when it begins full operation.

5. Since it is not in full operation one cannot determine how much the students' behavior and/or academic performance has improved.

COMMENTS:

Section 2. Staff

8. The staff selected to work in this project is excellent. Several members of the staff have attended classes at the University of Puerto Rico to prepare themselves to do a better job.

9. The staff is greatly motivated and is very enthusiastic to start producing.

10. The staff worked with some of the students on projects, and from the evidence they have excellent rapport.

11. Individual staff members are fully aware of the objectives and philosophy of the project.

12. Improved approaches to learning will improve when the project is in full operation.

Section 3. Equipment and Budget.

13 & 14. The materials and equipment for the project are of the best quality. However, most of the equipment is still in boxes, as the building where the the studio was to be located has not been built. This problem of the building is handled by the Department of Education.

The Department of Education has temporarily allowed the staff of the project to use a room in the [illegible]th. floor of its building to store part of the equipment. The staff has improvised a small area to serve as a studio. Three cameras have been set to start working on projects. Only a few programs have been filmed, as the evidence examined showed.

The staff has cooperated with the Department of Education by producing the "Festival de Inglés", the annual English program presented by the educational region of San Juan. Fourteen schools and over two hundred students participated.

Also cooperating with the Department of Education the staff produced a program for the Centro de Recursos de Investigaciones Pedagógicas.

The staff of the project started to work using three cameras and some of the equipment with very limited facilities at their improvised studio from December 1972 to April 1973.

15. The local funds for the continuation of the project, as far as I know, are very limited.

16. The financial records are properly kept.

COMMENTS:

Section [illegible]

17. a-d) The teachers and students of the eleven schools in the MNA area covered by the project are well informed about the great educational and cultural possibilities of the project. There have been several meetings held at their schools and at the Department of Education. The third grade and seventh grade teachers of the area have met with the project staff to plan projects in English, Spanish, Mathematics and Science. There is evidence of several programs that were filmed. The teachers who are not directly involved with the project have been informed by their school supervisors and advisors, but since the project is not in operation they are not fully aware of it. The parents have been informed by the students, but the community at large is not yet informed.

18. a-f) Since the project is not in operation it has not been publicized in the local newspapers, radio/TV, slides/films, etc. Talks of the project at teachers' meetings in the district have been most of the publicity.

19. I did not see any evidence of the publicity, but I did not expect to, since the project is not in operation. I learned by talking to the staff of the project that by participating in the English Festival of the Department of Education the project received much publicity among the fourteen schools participating.

Section II. Staff

8) To what extent is there an adequate number of staff for carrying out project activities?

excellent 4

9) To what extent are the project staff enthusiastic about the project?

very enthusiastic 4

10) What kind of rapport does staff seem to have with students?

excellent rapport 4

11) How aware are individual staff members of overall goals, objectives and philosophy of the project?

fully aware 4

12) Do you feel that as a result of being exposed to this project, staff and teachers are using improved approaches to learning? In other words, are teachers --after experience with this project -- better able to perceive possibilities for improving the learning environment?

staff and teachers will improve learning environment

Total number of points: 12

Section III. Equipment and Budget

13) To what degree are the materials, equipment and facilities of the project adequate for achieving project objectives?	see comments	
14) To what degree are the available materials and equipment being used creatively and effectively by project staff?	see comments	
15) How great are the possibilities for local funding after Title III funds are terminated?	very limited	1
16) To what extent are the project's financial records being properly kept?	excellent	4

Total number of points: 5

Section IV. Dissemination

17) How successful has project staff been in publicizing their program?

a. to teachers in the district who are not directly involved in the project ____see comments____

b. to parents ____" "____

c. to the community at large ____" "____

d. to students in the district who are not directly involved in the project ____" "____

18) To what extent (i.e. how frequently) have the following media been utilized in publicizing the project's activities?

a. newspapers ____see comments____

b. pamphlets/brochures ____" "____

c. radio/TV ____" "____

d. talks and exhibits ____" "____

e. conferences/workshops ____" "____

f. slides/films ____" "____

19) Generally, how would you describe the quality of the project's dissemination efforts? ____see comments____

Total Number of points: ________

Section V. Evaluation

20) To what extent has the staff systematically gathered data on the program?	excellent 4
21) To what extent has the project developed an evaluation strategy?	see comments
22) To what extent has the project acquired, or developed if necessary, evaluation instruments?	" "
23) To what extent are the evaluation instruments appropriate for the task?	" "
24) To what extent has the project implemented its evaluation strategy?	" "

Total Number of Points: 4

Section 5. Evaluation.

20-24 The staff has kept excellent data of all the program. However, since it has not been in full operation the evaluation strategy and evaluation instruments have not been determined.

VI. PROJECT OPERATION : (Briefly assess the quality and/or adequacy of the elements listed below).

Personnel : The C.C.T.V. #77 (72-31) has 14 members in the project staff with a total salary of $110,952 yearly, working full time. Included in this report are each person's position, duties, and salary. Three members of the staff attended the University of Puerto Rico to take courses; one in electronics and two in cinematography. Ten persons attended courses in the United States to specialize in the field assigned. Consultants for the project have worked on special occasions, as needed. It is evident that for this project there is great need for a specialized staff. The members of the staff are very eager to excel in their performance. They also expressed their desire to see the C.C.T.V. project in full operation.

Physical facilities : There are very limited facilities to work since there is no building available. The improvised studio is very small.

Budget : An increase in the budget could be used because of the use of consultants. Extra expenses are minor parts for the equipment and materials for the presentation of videotapes.

Non-public School Participation : Non-public school participation would be welcomed once the C.C.T.V. is in operation. This participation would enrich the curriculum of the schools in the project.

Community Involvement : The community of the Model City to which the C.C.T.V. project #77 will serve is mostly of low socio-economic standards. I think that they could be involved.

Extent of involvement of students, teachers, and parents : The teachers and students of the third grades and of the seventh grades in the eleven schools that started to work on C.C.T.V. projects, was limited since the C.C.T.V. is not in operation.

Extent of general interest and enthusiasm shown by faculty, students, parents, and others : More enthusiasm and interest will be shown when the project is in operation.

Comments : It is a shame, that due to reasons that I do not know, the building contract for this project was not fulfilled and such valuable equipment is still in boxes, excellent trained staff is not being fully used, and eleven schools are deprived of the latest in educational technology.

Section VII - Summary

A. What do you consider the project's greatest strengths?

The projects' greatest strengths are the large extent of the population of a very deprived area that will be reached, the great educational benefits that they will derive, the benefits it will bring to parents and the community when involved with the school, and the educational facilities and proficiency in teaching offered to the teachers.

B What do you consider the project's greatest problem areas?

It's greatest problem is that it is not in operation and that no future date has been set.

C. What modifications would you recommend for the program? How might project staff correct the problem areas you mention above?

Perhaps another building could be rented to establish the C.C.T.V. project.

D. Do you think the project should be continued? Explain.

I think the project has great educational and cultural possibilities that would benefit the students and community of the Model City. THerefore, it should be continued.

E. Please indicate any additional assistance you think this project needs.

Additional assistance of specialized personnel might be needed, as the director of the project may determine.

F. Any other comments you would like to make :

This is an excellent project to develop and operate. The staff of the central offices of the Department of Education will also benefit.
I congratulate its director and staff for their enthusiasm, zeal, and ingenuity to make the project a success.

EVALUATION REPORT

1972-1973

#79 THE CENTER FOR THE PRODUCTION OF MATERIALS FOR HANDICAPPED CHILDREN

Title III, Law 91-230

Submitted by:

Irmina A. de Aldarondo
General Supervisor
External Evaluator

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EVALUATION REPORT

1972-1973

Title III Project Number 64-3666

Proposal # 79

Center for the Production of Materials and Related Services for the Handicapped Children

INTRODUCTION:

A- Description of the project

The Center for the preparation of model materials and related services has its main office in Ciudad Nueva School. (Río Piedras B District). It is located in París Street in Floral Park, Hato Rey, Puerto Rico. There are five subcenters in Mayaguez, Ponce, Humacao, Caguas and Arecibo. These subcenters are oriented, supervised, and provided with curricular materials and audio-visual equipment from the Center at San Juan. The whole project has a specialized professional staff which consists of the director of the project an assistant director, a psychologist, two speech therapists, a librarian and fifteen demonstration teachers. The Centers Office at San Juan provides pre-service and in-service trainings for teachers. The Center also offers psychometric evaluations and the services of the speech therapists.

In the Center at San Juan there is a complete library for special education which is visited by different persons to use its facilities.

The Center is part of the Special Education Program of the Department of Education of Puerto Rico. This program is under the direction of Mrs. Hilda Grana de Bonilla.

There are different kinds of handicapped children attending our public schools. Not all of them are in special groups. Most of them are competing with regular students.

So the teachers need model materials and related services to offer chances of succeeding to these students in their work. They have to give special attention to the slow learner in the same classes of the regular groups.

This is one of the reasons why the Center faces a challenging opportunity for the production of curricular materials.

The following table shows the number of handicapped children which the Center has served:

The following table shows the number of handicapped children served by the Center

Type of handicap	Benefits Received 1970-71					Benefits Received 1971-72					Benefits Received 1972-73				
	Number of participants	Curricular materials	equipment	evaluations	Therapy	Number of participants	Curricular materials	equipment	Evaluations	Therapy	Number of participants	Curricular materials	equipment	evaluation	Therapy
1. Trainable mental	30														
2. Educable Retarded	3730	X	X	X	X	4,574	X	X	X	X	5,100	X	X	X	X
3. Emotionally Disturbed	20		X			30		X			180	X			
4. Hearing problems	10		X			10	X				20		X		
5. Visually impaired						10	X				110		X		
6. Language and speech problems	30		X	X	X	20	X				102			X	X
7. Learning problems											225		X		
8. Orthopedic Problems											167		X		
9. Regular groups	615			X	X	756			X		873			X	
Total	3835					5,433					7,268				

Budget

a.	For professional services	$379,973.00
b.	For traveling	16,000.00
c.	Materials and equipment	20,000.00
d.	In-service training	18,000.00
e.	Other general expenses	63,500.00
	Total Budget for the proposal	$497,473.00

NOTE:

From this total, $373,249 belong to FY 1972-73 granted funds and $124,224 were FY 1971-72 carry-over funds.

Objectives of the project:

1. To reinforce and improve the materials and related services for the handicapped children.
2. To offer in-service training to the professional staff of the Center, school teachers and other personnel related with special education in:
    a. Nature, diagnosis and correction of teaching problems
    b. Methods in teaching the educable retarded.
    c. Use of the materials produced in the Center.
    d. Identification and teaching of blind students.
3. To give special attention to students of normal groups with learning problems (slow learners)
    a. To plan with the school personnel of the district of Río Piedras B the study of a group of one-hundred-fifty students with learning problems.

b. To select the experimental and the control groups by means of extensive evaluation:

  a- academic

  b- psychometric

  c- speech evaluations

  d- audiologic

  e- visual

c. To analyze the results of this evaluation through meetings with parents, teachers and other personnel related with the sampling.

d. To initiate the production of materials for the skill development of pupils with learning problems in experimental groups.

Project duration

The organization of the project began in February, 1970. It has been functioning for the last three years and three months.

Objectives of the evaluation

1. The main objective of the evaluation is to appraise the progress achieved toward the accomplishment of the objectives stated in the proposal,

2. To determine progress achieved by all the persons who are working toward improvement in the teaching of the handicapped children in Puerto Rico.

It will also help to determine the need of preparing curricular materials and offering related services to teachers of handicapped children. They can not prepare curriculum materials by themselves. They need the help of specialists.

Evaluation design

The following methods for gathering data were used:

1. Study of the proposal
2. Interviews to:
    a. Director of the project (Mrs. Miguelina Valdéz)
    b. Director of the Special Education Program (Mrs. Hilda Grana de Bonilla)
    c. Professional staff of the Center
    d. Teachers of different schools who are using the materials produced by the Center
3. Analysis of statistical records
4. Visit to the physical facilities of the Center
5. Visit to the Special Education Library
6. Meetings with project staff to determine to what extent they have reacted, what do they know about the operation of the Center and about each other
7. Questionnaires to teachers who are teaching mentally retarded in the following schools of Río Piedras B, San Juan B and Río Piedras A:
    a. Emilio del Toro
    b. Bolívar Pagán

   c. Henna
   d. Rodríguez Cabrero
   e. Víctor Parés

8. Visit to the Mobile Unit to see the therapists dealing with students with speech problems and to observe the facilities of the bus.

9. Examination of the materials produced by:
   a. The Center at San Juan
   b. Humacao Educational Region

10. Visit to the Humacao Educational Region to determine the use that the teacher, the curriculum specialist and the supervisor are giving to the materials received from the Center at San Juan.

Results of the evaluation

1. The following curricular materials were produced during the year 1972-73:
   a. Mathematics
      1. Revision and a new edition of a curricular guide for the teaching of the educable mentally retarded at the first level.
      2. Revision and a new edition of diagnostic tests.
      3. The guide for the teaching of mathematics in the second and third levels is being revised

B- Language (Spanish, the vernacular)

1. Revision and a new edition of a guide for the teaching of the educable mentally retarded at the first level.
2. Revision and a new edition of the diagnostic tests.
3. The following materials are being produced:
   a. Guide for the teaching of Spanish of the mentally retarded for the second and third levels
   b. Test to determine specific learning deficiencies
   c. A manual of activities to meet specific learning deficiencies
   d. A series of readings for the pre-vocational level

C- Social Studies

1. Production of the following units of Social Studies for the teaching of the mentally retarded:
   a. Family Life
   b. Health and Hygiene
   c. The Neighborhood
   d. Transportation
2. Five additional units are being produced

D- Handicrafts

1. A guide for the three levels has been produced for the teaching of handicrafts to the mentally retarded.

E- English

1. Reproduction of English units for special groups produced in the San Juan Educational Region in 1965.

2. English units containing daily life vocabulary are being produced

F- Curricular materials for trainable mentally retarded

1. A guide for the development of self-help skills

2. A guide for social skills development

3. Production of pictures to supplement the teaching process and exercise sheets.

4. Preparation of a list of skills to guide achievement according to different levels of difficulty and their classification in different areas.

G- Curricular materials for emotionally disturbed children

1. Exercises to supplement the teaching of these children.

2. Production of eleven exercises for social studies, seventeen for the teaching of mathematics and fifty-two for the teaching of language.

II- Activitites for the in-service training of Center staff, teachers and other personnel related with special education.

a. Seminars offered to the Center staff:

Date	Themes	Teachers	Technitians	Therapists	Psychologists	Supervisors	Resource Persons
August 8, 10, 1972	Nature of the child with learning problems. Use of the test MSST	1			1		Dr. M. Sheperd
September 21, 22, 1972	Extended curriculum in aritmetic	1					Mr. Ricarte Nieves
September 28, 29, 1972	The kindergarten program for the child with learning problems	1					
October 9, 12, 1972	The multidisciplinary point of view in the childs' diagnosis	4	3	1	1	1	Mr. Ricarte Nieves People from United States, the Caribbean Area and South America.
October 17, 1972	Physical Education for mentally retarded	2					People from the United States and from the U. P. R. Personnel from the Evaluation program at the Department of Education
October 20, 1972	Preparation of tests						
November 22, 1972	Procedure to prepare case studies and profiles	6	2	1		1	Mr. Jorge A. Domínguez
November 28, 1972	Administration, correction and tabulation of tests	7	3	2		2	Mrs. Emma Delgado
December 12, 13, 1972	The nature of the child with emotional disturbances	4	2			1	

January 31, 1973	Correction of Goodenough's test	4					Jorge A. Domínguez
February 15, 1973	Administration, correction and tabulation of the Spanish tests produced at the Center	6	2				
March 2, 1973	Curricular materials to be used in the teaching of emotionally disturbed children	5	3			1	Mrs. Carmen Romero Mrs. Rosa E Págan Mrs. Odessa Ortega, Miss. G. Aponte Miss F. Vergara, Mrs. Lucila Torres
April 4, 6, 1973	The educational diagnosis and its use in the planning of teaching	4	3				
April 11, 13, 1973	The teaching of the child with hearing problems		3			1	Mrs. Catheryn Quin

b- Different meetings were held in the six educational regions to offer orientation in the use of Social Studies units produced at the Center and the arithmetic tests that were revised during this year.

The following table shows the participants to this in-service training in each educational region:

Region	Date	Teachers	School Directors	Coordinators	Supervisors	Superintendents	Teachers' Aides	Participant-Teachers	Social Workers	U. P. R. Students
San Juan	30-1-73	16	1		1	1				
	1-2-73	12	1							
	6-2-73	14	2		1			9		
	7-2-73	14		1				3		
	8-2-73	16								
	9-2-73	17	1	1	1					
	21-2-73	12								
Caguas	16-2-73	20	3		1			3		
Arecibo	25-1-73	27	3	1						
	30-1-73	27	3	1						
Mayaguez	1-2-19-73	45	15	2	2					
Ponce	8-2-73	20			1					
	13-2-73	20			1					
Humacao	12-1-73	16	1		1	1				
	16-1-73	20								1

c- Meetings to offer orientation about the nature of the mentally retarded children and methods to teach them, administration, correction, tabulation and use of the results of tests.

The following table shows the number of participants from San Juan and Humacao Educational Regions:

	Teachers	School Directors	Coordinators	Supervisors	Superintendents	Teachers' Aides	Participants Teachers	Social Workers	U. P. R. Students
San Juan									
15-2-73	27	5				1			2
16-2-73	27	5				1			2
Humacao									
30-3-73	43	2		1	1				

d. The following table shows the number of participants who received orientation about the services offered by the Center and how to use the guide for the teaching of Spanish.

	Teachers	School Directors	Coordinators	Supervisors
Arecibo				
20-9-72	9	1		
22-9-72	11			
Ponce				
8-72	16			1
Humacao	12			
19-10-72				
Mayaguez				
2-72	25			
Totals	73	1	0	1

e- The following table shows the number of participants who received in-service training in the use and handling of audio-visual equipment and materials.

Date and Region	Teachers	School Directors	Coordinators	Supervisors	Superintendents
Mayaguez					
12-9-72	44		1		2
14-9-72					
19-9-72					
21-9-72					
Arecibo	25				
24-20-72					
26-10-72					
Ponce					
12-72	44				
2-73					
San Juan	25	1			
Totals	138	1	1		2

f- The following table shows the number of participants who received in-service training about the nature of the trainable mentally retarded and in the guide for the teaching of these children

Region and Date	Teachers	School Directors	Coordinators	Supervisors
San Juan				
16-1-73	5	1		
14-2-73	20	1		1
Arecibo				
31-1-73	5	2		
Humacao				
24-1-73	1			
Ponce				
20-2-73	2			1
Mayaguez				
10-1-73	3	1		1

G- In Arecibo, thirty four teachers, one school director, and two coordinators received orientation in behavioral objectives according to the taxonomy of Benjamín Bloom.

H- Also, in Arecibo Educational Region, fifty-two teachers' and two supervisors received orientation in the nature, diagnosis and treatment of school children with speech problems. Fifteen U. P. R. students received the same orientation.

I- Fifty-five U. P. R. students and five teachers received orientation in the nature of the mentally retarded children.

J- About sixteen persons from the University of Puerto Rico received orientation about the services provided by the Center.

III- Visits by the teachers of the Center to different schools of the educational regions to give individual help to the mentally retarded teachers as follows:

1.

San Juan Educational Region	School District	Schools Visited	Teachers helped
	Río Piedras A	7	7
	Río Piedras C	1	1
	Carolina	5	5
	San Juan B	6	6
	San Juan A	2	2
	Bayamón Norte	3	3
	Cataño	4	2
	Guaynabo	2	2

2.

Arecibo Educational Region	School District	Schools Visited	Teachers helped
	Arecibo	4	4
	Barceloneta	1	1
	Camuy	2	2
	Florida	1	1
	Hatillo	1	1
	Lares	1	1
	Orocovis	1	1
	Quebradillas	1	1
	Utuado	2	2

3.

Humacao Educational Region			
	Humacao	4	4
	Juncos	2	2
	Luquillo	5	5
	Río Piedras	2	2
	Yabucoa	1	1
	Río Grande	1	1
	Fajardo	1	1
	Patillas	1	1

IV- Children who have received psychometric evaluations are indicated in the following table:

San Juan Educational Region	School District	Schools	Number of Children
	At the Center	Referred by the Central Office	24
	Toa Alta	S. U. Federico Degetau	12
	Guaynabo	Frailes Altos	9
Mayaguez Educational Region	Lajas	S. U. Palmarejo	14
Caguas Educational Region	Aguas Buenas	S. U. Sumidero	8
	Barranquitas	Elem. Urban School	8
	Aibonito	Miguel Archilla	8
	Naranjito	Cabrera	4
		Total	87

V- Children who have received the services from the speech therapists: (See the table)

San Juan Educational Region	School District	School	Number of Children
	Río Piedras A		
		Monacillos	9
		William D. Boyce	7
		Vista Hermosa	1
		Rafael Otero	1
	Río Piedras B		
		Ciudad Nueva	2
		Gustavo Bécquer	7
		Rafael Hernández	3
		Angel Ramos	3
		Bolívar Pagán	2
		Felipe Gutiérrez	5
	Río Piedras C		
		Amalia Marín	4
		Marcelo	2
	San Juan B		
		Julio Henna	3
		Luis R. Cabrero	9
		Manuel Boada	3
	San Juan A		
		Emilio Castelar	5
	San Juan B		
		Santiago Iglesias	4
	San Juan A		
		Dr. Hernández	5
	Bayamón Norte		
		Carrión Maduro	6
		José Dávila Semprit	3
	Bayamón Sur	Diego de Torres	3
		José Andino	6
	Carolina	Villa Carolina	4
Caguas Educational Region	Caguas	John F. Kennedy	7
		Total	107

VI- Distribution of appropriate audio-visual materials and equipment

The following table shows the number of schools in each educational region which have received audio-visual equipment

	16 mm Projector	Big Reel	Small Reel	Opague Projector	Over-head Projector	Film Strip Projector	Rear Screen	Wollensak Tape Recorder	Novelco Tape Recorder	Screen	Projection Tape	Electric Extension	Record Player	Headphones	8mm Super-Projector	Slide Projector	Cassettes		
SAN JUAN	29	14	27	30	31	32	254	1	75	27	35	2	33	9	7	-	-		
CAGUAS	7	5	3	2	8	8	103	-	15	6	21	-	5	2	-	-	-		
ARECIBO	6	1	1	5	9	5	30	10	15	1	1	-	12	10	12	15	-		
HUMACAO	7	-	5	8	17	15	44	-	15	1	8	-	15	1	30	-	10		
PONCE	6	-	15	1	5	40	-	5	-	-	-								
MAYAGUEZ	7	1	1	5	15	5	30	10	9	2	-	15	10	30	15	-	-		
TOTALS	62	21	37	65	81	70	501	21	134	37	65	2	86	42	109	30	10		

VII- Services offered by the Special Education Library

1- Many persons visit the library to see how it functions and the services it offers.

Visitors	1970-1971	1971-1972	1972-1973
	409 persons	569 persons	630 persons

2- The clientele varies and increases each year. The following table shows the permanent clientele benefited by services provided by the center:

Permanent Clientele	1970 1971	1971 1972	1972 1973
1. Supervisors and technicians	4	6	8
2. Technicians from the Center	4	6	8
3. Specialists and teachers from the Center	7	7	11
4. Teachers of special groups	114	145	180
5. Social Workers	2	2	2
6. Therapists	2	2	2
7. Teachers from the Mentally Retarded Association	2	3	4
8. Handicapped adults	1	2	4
9. Teachers and Coordinators of Special Education at U.P.R.	2	4	7
10. Student teachers	5	12	19
11. Students from Speech Pathology	1	2	1
12. Summer Seminar Students	-	-	13
13. Psychological Institute		1	4
14. Psychologists from Head Start	1	1	1
15. Health Program Director	1	1	1
16. Skill Teachers	1	2	5
17. Visitors from Caribbean Area			13
18. Persons from the Evaluation Program at the Educational Region of San Juan	1	1	1
19. Persons from the regular school program	14	28	35
	162	225	319

3- The following table shows the annual circulation of the different materials up to March 30, 1973.

Materials which Circulate	1970-1971	1971-1972	1972-1973
A- Printed materials			
a. Books-pamphlets	1,180	1,059	860
b. Magazines	11	60	15
c. References	87	319	242
Total	1,278	1,438	1,117
B- Audio-Visual Materials			
a. Films	149	405	525
b. Records	17	72	46
c. A.V. Aids	326	698	499
Total	492	1,175	1,070
Total Printed Materials	1,278	1,438	1,117
Total Audio-visual materials	492	1,175	1,070
Gran Total	1,170	2,613	2,187

VIII- The Center conducted a research to select 150 students from Río Piedras B school district with learning problems (slow learners) in order to prepare materials for the development of skills. These are 1,091 pupils who obtained 15% or less in the General Ability Test. They have not received special attention from any other special project for learning improvement. Their teachers and school principals are interested in learning how to help them and their schools are near the Center.

These are the reasons why they selected schools from the Río Piedras B School District.

They selected two schools for the experimental groups and three for the control group.

They are similar in socio-economic conditions and are located in the same geographical area.

These pupils obtained a low percentile in the General Ability Test and their performance is low in their regular classes.

Twenty-two teachers from the primary grades with an enrollment of 746 students are included in this project in the experimental group. These are the following schools:

1. Felipe Gutiérrez School
2. Israel School

Only 150 students will be selected from the total enrollment of 746.

For the control group they are still working in the selection of the students in the following schools:

1. Las Virtudes School
2. Santiago Iglesias School

The following tests were administered to the pupils:

a. Goodenough

b. General Ability Puertorrican Test

c. Basic Skills in Reading

d. Basic Skills in Mathematics

According to this research, there is a proportion of four to one pupils who need remedial teaching in reading. Aritmetic is the curricular area that needs more remedial teaching.

IX- According to the questionnaire administered to seventeen teachers of special groups in the districts of Río Piedras B and San Juan B the situation is as follows:

1. Eleven teachers have less than two years experience teaching mentally retarded children. It represents 65% of the total

   About 50% of them taught regular groups before mentally retarded.

2. Ten teachers out of a total of seventeen in the sample are provisional teachers. 58% of them have not finished the requirements for their position.

3. All of them (100%) are acquainted with the services offered by the Center and 100% of them say that they have received services from the Center such as:

   a. Audio-visual equipment
   b. Curricular materials
   c. Demonstration classes
   d. Tests
   e. seminars

4. All of them say that the services offered by the Center have helped them to improve their teaching methods.

5. Ten teachers say that the relations are satisfactory.

6. About 50% of them say that they need more time with the speech therapist.

7. All of them are individualizing teaching in their classes with the help of the curricular materials and the audio-visual equipment they have received. They are using all the materials and putting into practice the orientation received.

Conclusions and Recommendations

A- Conclusions:

1. The Center for the Production of Materials for the Handicapped Children have accomplished its objectives successfully during this year.

2. The Center staff is very skillful and competent in the preparation of materials. Almost all of them, including the members of the different regions, are proud of their work. The materials that were prepared by the staff at Humacao as a guide in the teaching of pre-vocational courses is excellent.

3. The Center is performing its duty completely, although it has faced different problems:

a- The personnel is not complete

b- The equipment to reproduce the materials produced is not enough for the whole island

c- The physical facilities are not appropriate. They are working in a very small area.

d- They were not able to buy a Braillemboo machine during this year due to different problems. They are planning to prepare materials for blind children. They have all the other resources.

4. This center fills a serious and functional need within the public school system of the island. The services offered by the Center ought to be increased during next year. They are not sufficient for the total enrollment of the island.

Recommendations:

1- The center needs laboratory rooms near it in order to pre-test the curricular materials produced. There is a room for mentally retarded children in the same building but the teacher in charge of it doesn't admit visitors in her room.

2- It is necessary to increase the services offered by the Center, especially in the vocational aspects. Pupils need vocational centers to finish the pre-vocational preparation they are receiving.

3. Puerto Rico should help this development and improvement of the teaching of the mentally retarded. The enrollment is large and more rooms and teachers are needed to fulfill the needs of these children. In this way, delinquency can be reduced.

4. This is the prettiest program I have ever seen and it must go on.

EVALUATION REPORT ON THE PROJECT
RESIDENTIAL CENTER FOR EDUCATIONAL OPPORTUNITIES IN MAYAGUEZ

1972 - 1973

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PROJECT TITLE : Residential Center for Educational Opportunities (CROEM), Mayaguez

DIRECTOR : Mr. Martín Alvarado Martínez

BUDGET : $452,726.00 ($195,166.00 - Title III)

DURATION OF PROJECT : 1968 - 1973

ENROLLMENT : 164

I. Introduction

A. Description of project

The Residential Center for Educational Opportunites in Mayaguez (CROEM) was begun the second semester of 1967-68. The Center emphasizes the teaching of natural sciences, mathematics and English. Students are selected who show a marked interest toward teaching as a profession.

It is an experimental school principally in the search for and the practice of innovative techniques and methods as well as in an enriched curriculum that satifies the needs, abilities, interests, actual situations and aspirations of students in high schools of Puerto Rico. In this way the Center hopes to produce a better citizen capable of loving and serving his fellowmen.

The Center has 107 students in eleventh and 57 students in twelfth grades, coming from all six educational regions of Puerto Rico. Distribution of origin of students enrolled is :

Region	Female	Male	Total
Mayaguez	28	23	51
Ponce	28	17	45
Humacao	16	8	24
Arecibo	18	3	21
Caguas	6	6	12
San Juan	2	9	11
	98	66	164

Thirty-one per cent come from the Mayaguez Region.

The 1972-73 budget for CROEM is $452,726.00, of which $195,166.00 comes from Title III funds and $257,560.00 from state funds.

The Center has the following personnel :

1	Director
1	Assistant Director
1	Director for evaluation and statistics
15	Teachers
1	Coordinator in technology
2	Librarians
1	Vocational counselor
13	Teachers
3	Resident teachers
2	Laboratory assistants
3	Secretaries
1	Graduate nurse
1	Gardener
4	janitors
1	purchasing agent
1	special paymaster

CROEM offers practice in the following processes of teaching-learning :

1. independent study
2. individualized instruction
3. tutoring by the teacher
4. tutoring by fellow students
5. modules in the schedule
6. flexible schedule

7. individual evaluation

8. outdoor classes

9. creation of new courses in the curriculum

Besides the academic program, other student services are : residences for students, cafeteria, transportation, laboratory, library, scholarships, and individual help, all of which contribute to successful living together in the Center.

B. General objectives of the Center

1. Offer students with potentials for becoming teachers a chance to improve their academic achievement through offering a varied curriculum and new instructional techniques.
2. Work toward developing a study program in which a pleasant atmosphere, flexibility and living together contribute to developing better attitudes and habits in the students.
3. Continue acting as a laboratory to study, analyze and implement new educational ideas that fit better into the educational system in Puerto Rico.
4. Offer teachers and students a chance to participate in planning and implementing curriculum.

C. Evaluative criteria

For Objective No. 1

1. Have the students improved their academic achievement?
2. What changes have been introduced into the regular curriculum?

For Objective No. 2

1. Has the development of desirable habits been introduced into the study program?
2. Are library services used frequently?

For Objective No. 3

1. How have they succeeded in implementing new ideas?
2. What evidence exists in relation to the implementation of ideas and their effectiveness?

For Objective No. 4

1. Have faculty and students helped in the planning and implementation of the curriculum?
2. Have needs, abilities and interests of the students been considered in planning and implementing the curriculum?

II. Procedures used to evaluate CROEM

A team of general supervisors from the regional office, specialists in their respective academic fields, visited CROEM May 7 to observe and evaluate the Center. Team members were :

Miss Patria Ramírez - sciences
Miss Aurea Padula - Sciences
Mrs. Gladys Roque - mathematics
Miss Margarita Alvarez - mathematics
Mrs. Wilda Jiménez - English
Mr. Daniel Acevedo - English

Mrs. Blanca Ramírez - Spanish

Mr. Celso Artigas - Social Studies

Mr. Ismael Ramos - Operations

Mr. Bernabé Torres - Evaluation

Miss Hilda Acosta - Regional Planner

Miss Gladys de León - Library

The following activities were carried out :

a. Meetings with CROEM administrative staff

b. Meeting with the faculty

c. Small group discussions

d. Classroom visits

e. Individual and group interviews with teachers and students

f. Observation of the CROEM faculty

g. Study records and monthly reports and other documents.

III. Results of the evaluation

A. Introduction

The basis of the educational program of CROEM is that the teaching-learning process be individualized, or at least that the curriculum as methodology be organized around the needs and interests of the students. Emphasis is given to developing skills and independent study. A spirit of inquiry and intellectual curiosity is promoted in the students. The organization of CROEM provides for taking care of the student needs.

The attitude of administration, faculty and students reflects identification with the CROEM program.

B. Observations by the group of supervisors on their visit to CROEM and later determining certain practices in the teaching-learning process that have proved relevant in the CROEM program.

1. Academic achievement

   There is evidence of attention paid to improving academic achievement.

   a. Diagnostic tests are given that help to place the student in the achievement level where he belongs. According to test results, the student is classified in terms of needs and the attention be should have.

   b. Provision is made for the intensive study so that the student acquires the necessary knowledge and skills. This includes class groups, independent work and tutoring by students already who have the knowledge and skills or by teachers assigned to do this.

   c. Written and oral tests are given periodically to determine to what degree the student is reaching the level of achievement desired. An individual record is kept to show the rate of change.

   d. Of 92 students applying to the University this year, 82 were accepted, or 90%. This includes those graduating in the summer.

C. The following data show the progress in academic achievement of a sample of 11 students from the twelfth grade enrollment of 57 :

Index at beginning	Index at end of year	% in general ability
2.20	3.80	--
1.80	3.20	98
1.80	2.60	85
2.80	3.60	--
3.00	3.80	70
3.00	3.80	58
3.20	4.00	--
2.60	3.20	95
2.80	3.40	96
3.00	3.60	98
3.60	4.00	85

One student increased the index by 1.60 points.

One student had an increase of 1.49 points.

Five students increased by .80 points.

Four students had an increase of .60 points,

All 100% of the sample showed academic improvement.

In achievement by subjects, the sample showed the 11 students from 12 th grade had:

Spanish :

Eight students improved their grades

Three students had the grade as the previous year

English :

Eleven students improved their grades

Mathematics :

Nine students improved their grades

Two students had the same grade as before

Science

Nine students improved their grades

Two had the same grade

Social studies :

Six improved their grades

Five had the same grades

An average of 8.6 students improved their grades, while the other 2.4 had the same as the previous year. This indicates there was a favorable change in the academic work of the students.

2. Enrichment of the curriculum

a. The Science Program greatly enriched their program. In addition to the regular courses of chemistry "Chem Study", biology (BSCS) and physics (PSSC) the following courses have been developed:

biochemistry	anatomy and human physiology
anatomy	environmental biology
principles of scientific research	

This variety of courses gives the student a chance to explore different fields of science and thus select and go deeper in those of his preference.

b. Other course offerings in the CROEM curriculum are: (*additional courses)

Spanish 11, 12 - advanced, conversational * and remedial*

English 11, 12 - basic, American literature, conversational English, andvanced English

Social studies - general history, Puerto Rican history, United States history, Latin American history*, Civics, social sciences*

Mathematics - advanced algebra, modern geometry, trigonometry, analytical geometry, principles of calculus*, special algebraic themes*, probability and statistics, remedial mathematics, computer mathematics.

Sciences - biology, biochemistry, general chemistry, organic chemistry, physics, advanced physics, principles of anatomy and human physiology*, principles of research,* environmental biology*.

Languages - French, German

Fine Arts - chorus, instrumental music, drawing, painting

Physical Education - physical culture

Typing - (without credit)

c. Students and teacher cooperate in the planning, implementation and evaluation of the curriculum.

d. There is active participation of students in the teaching, which means better achievement on their part.

e. The different curriculum areas are integrated, such as English and sciences, English and history, sciences and mathematics and all courses with the library and audiovisual. For the success of this integration there is constant communication among the personnel.

f. The content of Spanish and English is enriched from all the curriculum areas.

3. Extensive use of the library and increased hours open for service

a. The CROEM library is doing excellently. It is the basic foundation for the development of skills and attitudes of the students.

b. The library is open 24 hours a day with services of a librarian from 8:00 a.m.

to 11.00 p.m., Students act as assistant librarians voluntarily.

c. The residential set up of the Center makes possible the maximum use of the library.

d. At the beginning of course, students prepare a bibliography of available materials related to the course.

e. Teachers and students help select and purchase materials.

f. There is ample supply of books, although the number in Puerto Rican literature should be increased.

g. There is flexibility in lending books.

h. Students have developed the habit of and a desire for consulting many sources of information and a curiosity about the opinions of various writers on a subject, whether in agreement or not.

i. The library is handled by teams of librarians and students in thesearch for materials, planning activities, gathering materials produced, supplying information, selecting work for contests and for supervision.

j. Student attendance at the library is good. Daily average attendance was as follows :

January	92.2%
February	48.10%
March	43.0%
April	50.0%

4. Variety in instructional materials

a. There is a variety of teaching materials for use in the classes : globes, tapes, films, diapositives, slides.

b. Some materials used in the laboratory are obtained from the College of Agriculture.

c. Many sources of information are used and research is encouraged.

d. In the Conversational English and Introduction to Calculus courses materials were prepared by the teachers.

e. Social sciences teachers have prepared their own courses outlines.

f. Materials prepared in CROEM are in response to the problems of the students as identified by tests. Part of these materials are prepared to meet the needs of the 20% of the student body who are bilingual.

g. For the course in introduction to logic the teachers has already prepared 32 slides.

h. Material preparation in CROEM has several purposes :

individualization
independent teaching
remedial teaching

Syntheses, guides for developing skills, check lists for follow up on directions and laboratory materials are prepared.

5. The role of the teacher

a. It was observed the teacher is both guide and counselor to the groups of students. Students can talk to the teachers at any time, in or out of the classroom. They are tutors friends and counselors. This makes the student aware that he himself is responsible for his own progress.

b. Each teacher is responsible for 12 students.

c. The teacher is concerned about professional improvement and about providing a variety of materials and techniques for the students.

d. Training for teachers and students is reciprocal.

6. Schedule flexibility

a. Students noticeably attend those classes more often in which they are interested or they need more help. The students respond voluntarily to that interest. This indicates in itself there is a pleasant atmosphere for them, where they feel neither obliged nor threatened into going to school, without, at the same time, relieving them of the responsibility of fulfilling the demands of each subject.

b. The weekly program is divided into periods of 79 minutes for small group meetings. The teacher may, then, divide this unit into periods of 15 to 20 minutes depending on the activity to be carried out. The rest of the weekly time is used for large group activities, those of small groups, library study, research projects, laboratory work and independent study.

c. On Fridays there is an activities period called Actiflex where the student goes to activities previously planned and that interest him.

d. The individual program of teacher and students is flexible enough to permit the development of classes without being pressured by time and without using bells.

e. The students take part in Center activities through previous arrangement with their teachers, even when they have classes, as both cooperate in programming the work.

f. This flexible schedule was obtained by basing its organization on the teaching-learning needs. Diagnostic tests and continuous evaluation are the absolutely required instruments for this organization.

g. Many classes are held outside the classroom or use a natural situation such as the laboratory.

7. Varied use of instructional techniques

The instructional techniques are based on three aspects

Method, purpose and content

a. The process of research receives the greatest emphasis in every one of the courses. Student participation in scientific research projects shows the progress the students have made as a results of the terms used. A relative large percentage of the science enrollment (29%) indicate interest in continuing university studies in the sciences.

Student interest in becoming physics teachers has also been aroused; some have already begun their studies.

b. Tutoring - The CROEM student uses all possible human resource available at the Center in his search to satisfy his curiosity, clear up doubts, develop skills, acquire knowledge and better his attitudes.

CROEM teachers and students and some professors from the CAAM and IAU act as tutors.

The chance to act as tutor to other students has resulted in encouraging students to continue studying toward being teachers. (In one science group four students are interested in being teachers.)

Teachers have one day a week for concentrated efforts in tutoring.

English classes use bilingual students as tutors.

c. Individualized teaching - There is evidence that individualized attention is given students. The teacher, through diagnostic tests and study of needs, determines the areas requiring special attention of each student.

Each student is enabled to proceedat his own pace. If a student finds he has problems, he goes back the place these started, while others may advance until they are ready to begin university level studies.

The use of tutors makes individualized teaching easier.

Diversification of teaching materials makes it possible to take care of students in different ways.

Each student has a chart which shows his progress and work being done in terms of tests results.

Evaluation is individual.

d. Independent study

"The student selects the content of his teaching-learning according to his level and interest".

"Tasks are not assigned nor is time limited, but the teacher provides intensive supervision".

"Student evaluation is planned with him before beginning the learning process".

"Independent study permits individualization, growth, enrichment and schedule flexibility".

8. Use of resources

a. Services of a technology coordinator, vocational counselor and two librarians are used. Also, frequently there are consultants from CAAM and IAU for classes in biological sciences, English, chemistry and mathematics.

b. Some resources used by CROEM are Dr. Richard Beldin, CAAM-mathematics; Dr. Osvald Goering, University of Illinois professor on

"Outdoor Education"; Dr. Kenneth Fan, George Washington University; and Dr. Ilario Acarón, CAAM - Department of Engineering.

9. Evaluation measures used by CROEM personnel

   a. Test on habits and attitudes

      The Wrenn test on Study Habits is used, which gives an inventory of study habits.

   b. The Bell Personality Inventory

   c. Kuder Preference Record (Vocational Interests). The counselor, evaluation technician, teacher and student form a team to interpret the results.

   d. Personal evaluation chart - During orientation period this is given, using a questionnaire as guide, with questions about attitude, ambitions, responsibility, others.

   e. Monthly profiles. The teacher prepares a monthly profile on student progress.

   f. Occupational Interest Inventory of the California Study Methods. This is given to those students returned from the states who cannot take the Interest Inventory test in Spanish or those who prefer to take it in English.

   g. Case history. Each teacher prepares case histories on the students for whom he acts as adviser.

   h. Information Sheet on plans of Senior High School students

   i. Questionnaire on adjustment to living arrangements

   j. Questionnaire to parents or guardians (open questionnaire)

k. Questionnaire to teachers to evaluate the programs implemented in CROEM

l. Questionnaire to students to evaluate services, both academic and living. This questionnaire is given four times a year. In group meetings and in counseling meetings a report is offered on progress of suggestions.

m. Questionnaire on individual help to students referred for this service.

n. Questionnaire to students to evaluate a course

o. Questionnaire for self-evaluation, given at mid-term and at the end of each semester

p. List of evaluation criteria. A chart is prepared using as basis the student on entering and the grades he brought to compare with the grades he earns in the project.

q. Quizes, final tests, local tests and daily evaluation. Students suggest questions for examinations. Teachers ask students to bring in questions and, also, students suggest the kind of examination to be given.

r. In Spanish and English the following are used: written compositions, essays, monographs, topics for research or theses, oral tests, analysis of tapes.

10. Propaganda activities

a. Four meetings were held with parents or guardians with an average attendance of 145 persons.

b. Television, Club-6, school newspaper and radio programs have been used.

c, Students from University of Puerto Rico, CAAM and IAU have visited.

d. Thirty students from the leadership institute of the University of Washington visited the Center

e. Teacher groups from the Island have visited CROEM, among other towns they came from

Lajas
Aguadilla
Mayaguez
Orocovis
Aguada
Guaynabo

f. Communication between CROEM and other schools of the Island is good, in addition to an interchange of visits.

g. Two meetings were held to present achievements to superintendent and supervisors of the region.

II. Special projects

a. Laboratory for grammar

b. Spanish program for Neoricans

c. Course in writing and editing

d. Work with a tutorial program in the Cerro Las Mesas Elementary School and another one for 40 ninth grade students in the Barreto Junior High School, both schools in Mayaguez.

IV. Conclusions

After a careful study made by the team of supervisors we conclude that the objectives outlined by the Center have been satisfactorily developed:

a. The progress achieved by students in their academic work is relevant

b. The program is kept completely flexible in which students select and do in-depth study in areas of their choice.

c. The Center is a laboratory where educational ideas are studied and implemented

d. The participation of teachers and students is encouraged in planning and implementing the curriculum, thus maintaining good relations among them.

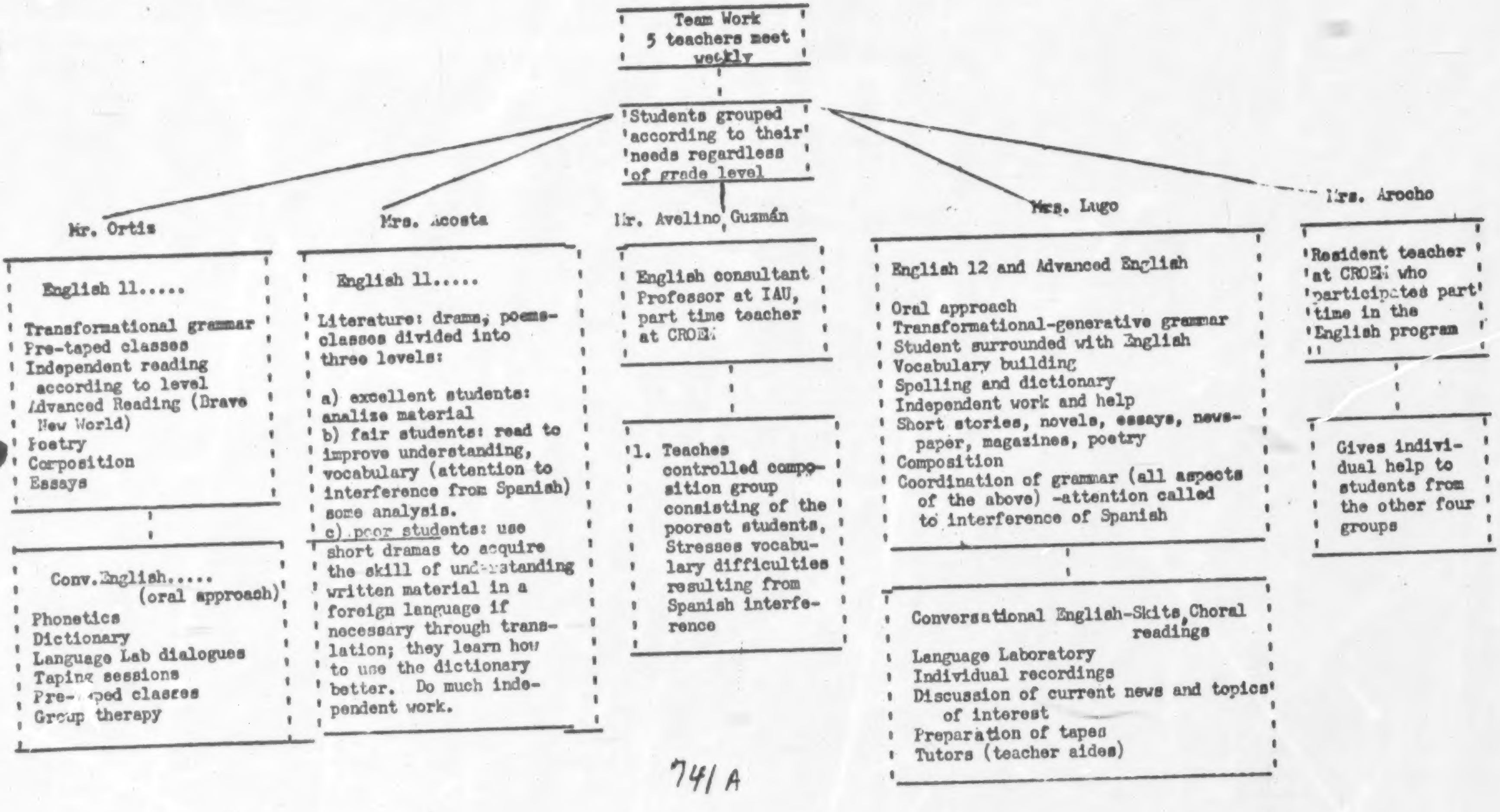
V. Recommendations

The group of supervisors offer the following recommendations:

a. That some aspects of the evaluation process be revised in the following terms :

Study the probability of determining the qualification of that student whose efforts are praiseworthy but which do not yet bring him up to the highest level within that qualification.

Examine the diagnostic tests in science for the purpose of incorporating a diagnosis of conceptualization.



Team Work
5 teachers meet weekly

Students grouped according to their needs regardless of grade level

Mr. Ortis

English 11.....

Transformational grammar
Pre-taped classes
Independent reading according to level
Advanced Reading (Brave New World)
Poetry
Composition
Essays

Conv. English..... (oral approach)

Phonetics
Dictionary
Language Lab dialogues
Taping sessions
Pre-taped classes
Group therapy

Mrs. Acosta

English 11.....

Literature: drama, poems-classes divided into three levels:

a) excellent students: analize material
b) fair students: read to improve understanding, vocabulary (attention to interference from Spanish) some analysis.
c) poor students: use short dramas to acquire the skill of understanding written material in a foreign language if necessary through translation; they learn how to use the dictionary better. Do much independent work.

Mr. Avelino Guzmán

English consultant
Professor at IAU, part time teacher at CROEM

1. Teaches controlled composition group consisting of the poorest students, Stresses vocabulary difficulties resulting from Spanish interference

Mrs. Lugo

English 12 and Advanced English

Oral approach
Transformational-generative grammar
Student surrounded with English
Vocabulary building
Spelling and dictionary
Independent work and help
Short stories, novels, essays, newspaper, magazines, poetry
Composition
Coordination of grammar (all aspects of the above) -attention called to interference of Spanish

Conversational English-Skits, Choral readings

Language Laboratory
Individual recordings
Discussion of current news and topics of interest
Preparation of tapes
Tutors (teacher aides)

Mrs. Arocho

Resident teacher at CROEM who participates part time in the English program

Gives individual help to students from the other four groups

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EVALUATION REPORT

Buchanan Educational Opportunities Center

1972 - 73

PROJECT EVALUATION

Title III- Law 89-10

Submitted by: Irmina A. de Aldarondo
General Supervisor

San Juan Regional Office
Evaluation Program
Department of Education
Hato Rey, Puerto Rico

EVALUATION OF THE BUCHANAN EDUCATIONAL OPPORTUNITIES CENTER

I. Introduction

A. Description of the project

The Buchanan Educational Center was created by the Department of Education of Puerto Rico in 1966 with economic resources provided under the Elementary and Secondary Education Act, P.L. #89-10 (E.S.E.A.), Title III. These funds were combined with funds of the Commonwealth of Puerto Rico.

This educational center is located at Fort Buchanan in Caparra, near San Juan, the capital city, with an extension of twenty-two acres. This is a federal property granted to the Department of Education by the Federal Government.

It is organized around five main areas following the existing organization of the other high schools around the island.

The first area is academic. There is a director and an assistant director. The academic teachers are under the supervision of the assistant director. Students are evaluated during and at the end of each semester receiving A, B, C, D or F grades.

The second area is vocational. It has a principal, eighteen vocational teachers and a counselor. Fifteen technical and semi-technical courses are offered.

The third area has to do with services to the students under the direction of a coordinator. This coordinator is in charge of the medical services, social work, registration, admissions and vocational counseling.

The fourth area is composed of the Educational Resources Section. It is also directed by a coordinator, who is in charge of coordinating the external and internal resources which contribute to improve the teaching learning process. These resources are the following: language laboratory, visual aids, field trips, cultural and social activities and the school library.

The fifth area has to do with the administrative structure. It is composed of an administrator, an administrative officer, a property officer, a fiscal officer II, two secretaries III, a secretary II, two clerk typists I, a messenger, a reproduction machine operator, a librarian, a graduate nurse II, ten janitors, nine cafeteria employees and five maintenance employees.

B. Physical Facilities

The Center has nineteen former military buildings on a loan basis. They have been remodeled and converted into the kind of facilities that may meet the needs of the Center.

The facilities are the following:

Academic classrooms	27
Vocational classrooms	5
Vocational workshops	12

Laboratories	2
Library	1
Cafeteria	1
Office for services to students	1
Assembly room	1
Mini-theater	1
Offices for administrator purposes	4
Volleyball court	1
Curriculum center	1

C. Type of Students

Preference is given by the Center to the following types of students:

1. students between ages of 16 and 21 who for different reasons have left school before completing the requirements for their high school diploma. They should have an equivalent of 9th grade and great desire to continue their high school studies.
2. students with difficulty in speaking Spanish because they have been educated in the United States, the majority of whom are children of Puerto Rican extraction.
3. students who desire to learn a trade or who are interested in taking technical or semi-technical employment after graduating from high school. They must be between the ages of 16 and 21.

D. Budget for school year 1972-73

1. Source of the funds

a. Federal Funds

1. Title III (Law 91-230)-----	$684,528.
2. State funds -------------	150,000.
Total---------	$834,528.

2. Average expenses per student

Enrollment	1972-73
a. First semester ------------	785
b. Second semester----------	833
c. Annual average-----------	809

		EXPENSES PER STUDENT		
Budget Entry	Total Funds	First Semester	Second Semester	Annual
1. Personnel services	$591,668	$ 753.72	$ 710.28	$ 731.35
2. Trips	18,000	22.93	21.61	22.24
3. Other operational expenses	224,860	286.44	269.94	277.94
TOTAL	$834,528	$1,093.09	$1,001.83	$1,031.53

Note:

In the program of studies at the Center, each school semester in the academic area is equivalent to a school year in the public school system.

II. Project Objectives

A. General

1. To make the Educational Opportunities Center a school that may offer students a program of studies and experiences that will help prepare them for the demads of available work opportunities.
2. To offer the students a curriculum or program of studies which is different from the traditional one found in the high schools of Puerto Rico, and at the same time, allow them to acquire habits of conduct and work that will build the self-confidence needed for the improvement of family and community life relationships.
3. To invite educators from the Island who can offer new ideas as a mean of accelerating the teaching-learning process of those students who have been out of school for at least six months.
4. To try to develop co-curricular and extracurricular programs of a cultural nature, to better human relations among the student body in order to help them mature socially, politically and emotionally.

B. Specific

After offering various educational opportunities in the academic field, as well as the vocational, we expect the students to have acquired:

1. Knowledge
   - a. complete the requirements for a high school diploma.
   - b. complete the requirements for the secondary school in an accelerated program of studies in a year and a half, and at the same time, acquire vocational skills that will prepare them for a job, or to enter colleges or universities.
   - c. participate in a special program that will help them improve the basic skills of communication since they have difficulty in mastering the Spanish language.
   - d. enroll in either advanced vocational courses or enter university level study.
   - e. participate in a special program based on their needs (especially to students from other schools outside the island and United States).
2. Attitudes
   - a. develop interest in their studies.
   - b. develop respect and courtesy in their daily behavior.
   - c. develop good taste in clothing
   - d. develop sportmanship toward their peers

3. Skills

(manual abilities in the vocational field selected)

III. Project Duration

This project was initiated in 1966 and will continue an long as it serves the purposes for which it was created and as long as it receives the necessary appropriation from the Commonwealth of Puerto Rico.

IV. Objectives of the Evaluation

This evaluation will try to appraise the results so far attained, the progress effected, the perspective of the program, the difficulties encountered, and how these have being overcomed by the persons in charge of implementing the project.

EVALUATION DESIGN

Objectives	Criteria	Means
1. After offering various educational opportunities in the academic field, as well as the vocational one, we expect the students who: a. are dropouts between the ages of 16 and 21 b. are graduates from the 9th grade c. live in culturally deprived areas, to complete the requirements for a high school diploma	1. Are the students chosen according to the criteria established by the Center? 2. How many students enrolled during the year completed their studies in the Center? 3. How many of them received the high school diploma?	1. Study of the project proposal. 2. Interviews with: Guaynabo School Superintendent, Director of the Center 3. Visits to the Center including visits to the classroom.
2. To give educational opportunity in a Special Program to students between the ages of 16 and 21 who have difficulty with the Spanish language, because they have been educated in United States.	4. What percentage of the students enrolled in the Center have come from the states? 5. Does the Center offer a special program for them?	Administration of questionnaires to: a. director b. teachers c. students d. other personnel
3. To enroll students who are interested in either advanced vocational courses or preparatory ones to help them to enter university level.	Does the Center offer advanced vocational and preparatory courses to interested students?	Director and guidance counselor reports

Objectives	Criteria	Means
	Is there any coordination with the community agencies and universities to offer employment to students who take vocational courses?	
	How many graduates from the Center are employed?	
	How many are attending the universities in the Island?	Director's report
4. To train teachers at the Center in modern teaching techniques and work with modern equipment to insure effectiveness in teaching.	What kind of in-service training has been offered teachers?	Questionnaires to teachers and director's
	What are the results?	
	Have the teachers received training in audiovisual aids?	Director's report and questionnaires to teachers.
5. To better human relations among the student body in order for them to mature socially, politically, emotionally and vocationally through special cultural programs.	Is there any relationship between the program of studies and other activities offered by the Center to the students?	Direct observations Individual interviews with students
	Have the students changed their attitudes after having been in the Center?	Questionnaires to students.
	Do they receive followup in this respect?	Interviews with teachers.

VI. Procedure used for the evaluation

With the purpose of being more objective in this evaluation the following acitivities were carried out:

1. interviews with directors and personnel in charge of the project.
2. visits to the center.
3. a questionnaire was administered to a sample of 195 students distributed as follow:

Grade	Number of students
10th	29
11th	60
12th	30
Business courses	40
Vocational courses	36
Total-----	195

4. a questionnaire was administered to 43 members of the faculty, including academic and vocational teachers, counselors and social workers.
5. another questionnaire was given the school director which included parts to be answered by the registrar.
6. study of the evaluation report of April 1972.
7. study of the followup given by the Center to graduates.
8. study of the project's plan of work for the year prepared by the director, teachers.
9. other studies and statistics related to the Center.

VII. Results of the Evaluation

After analyzing all data as a result of the activities described on Part VI, the following are some of the most important results:

1. Crieteria used by the Center to select students
   a. high school drop-outs between the ages of 16 and 21
   b. 9th grade students who do not continue high school studies
   c. students with the difficulty in Spanish who have been raised in the United States and are Puerto Rican descendants.
   d. married students willing to study in the Center.
   e. students who have received a high school diploma and are interested in technical or semi-technical vocational areas to be prepared for a better job
   f. students who are out of school and are interested in the academic area to continue studies in the universities of the island
   g. students with Puerto Rican parents from other schools outside of Puerto Rico but not the United States
2. These students have the following requirements for admission:
   a. Age: 16 to 21 years old
   b. a minimum preparation of 9th grade

c. Six months or more out of school

d. Unemployed

e. Socio-economic limitation

f. Annual family income of $3,000 or less

g. Interested in getting a high school diploma

The result of the questionnaire administered to 195 students reveals the following:

-. Time spent by student out of school before entering the Center.

	Number	Percent
Less than six months	26	13
Six months to one year	37	19
1 1/2 years	47	24
2 years	19	10
more than 2 years	66	34

-. Time spent by the student studying in the Center

	Number	Percent
Less than six months	3	01
Six months to one year	129	66
1 1/2 years to two	45	23
2 1/2 years to three	18	10

754

-. Student age

	Number	Percent
Less than 16 years	0	00
16-21 years	181	93
over 21 years	14	07

-. Sex

Boys	Girls
96 = 49%	99 = 51%

Notice that the majority of the students were selected according to the requirements established by the proposal.

3. The following table shows the origin of the students.

August 1972

School District	Number of student	% of the total enrollment
Bayamón	189	24.00
Río Piedras	157	19.00
Cataño	133	17.00
Guaynabo	58	7.02
San Juan	53	7.00
Carolina	42	5.00
Toa Baja	36	4.02
Santurce	35	4.00
Hato Rey	29	4.00
Caguas	29	4.00
Toa Alta	11	1.00
Dorado	11	1.00
Vega Alta	5	.50
Comerío	5	.50
Trujillo Alto	3	.37
Manatí	2	.25
Vega Baja	2	.25

School District	Number of student	% of the total enrollment
Aguas Buenas	2	.25
Canóvanas	1	.12
Loíza Aldea	1	.12
Corozal	1	.12
Aibonito	1	.12
Barranquitas	1	.12
Camuy	1	.12
Morovis	1	.12
TOTAL	803	100.00

4. The table that follows shows the follow-up given to the students who have been graduated from the Center since 1966.

Followup on Graduated Students
1966 - Dec. 1972

	Graduated Students	Working in P.R.	Working in U.S.A.	Studying U.P.R. + Regional Colleges	Studying in the C.A.A.M.	Studying in other Universities	Vocational and technical courses	Police Department	U.S. Armed Forces	Job Corps	Fire Department	Medical Treatment	Business Courses in High School	Housewives	Nursing Schools	Additional courses in High School	Unemployed	Unknown	TOTAL
1966-67	169	59	11	18			24	2	13	1		1		7			22	11	169
1967-68	507	92	30	93		8	126	2	17			1	80	9	4		36	9	507
1968-69	756	250	55	62	3	9	157	3	24			5	50	-	9		53	76	756
1969-70	713	156	37	79	4	13	208	2	14	1	2	6	89	15	8		37	42	713
1970-71	395	50	28	40	3	28	120	5	14	1	1	9	50	5	4		19	18	395
1971-72	571	130	32	40	2	20	180	3	15	-		7	42	17	5		53	25	571
Dec. 1972	97	18	6	2		4	35	-	5	-		1	6	3		4	7	6	97
TOTAL	3,208	755	199	334	12	82	850	17	102	3	3	30	317	56	30	4	227	187	3,208

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5. According to the information given by the Director, the dropouts in the academic courses are less than in the vocational. See the next table.

1972-73		
(1) Academic Courses		
No. of Drop-out	% of Desertion	% of Retention
93	8.61	91.29
(2) Vocational Courses		
414	32.8	67.20

Note: This information includes both semesters up to May 25, 1973.

6. Use of services offered by the Center

a. Cafeteria	190
b. Scholarships	133
c. Transportation	133
d. Orientation	91
e. Library	89
f. Medical	45

At the same time they indicated that the following services must be improved:

a. Medical - (dentists and other specialists)

b. Transportation -

c. Employment out of the Center

d. Parking -

e. Recreational areas -

Services offered by the Center and the quality according to the teachers:

N = 43

Kind of service	Good	Fair	Deficient	Total
Administration	37	5	1	43
Library	41	2	0	43
Orientation/Counseling	36	5	1	42
Cafeteria	29	13	1	43
Transportation	16	20	5	41
Economic help	13	20	9	42
Language laboratory	31	7	1	39

Orientation to the students: Sixty-eight per cent of the students answered that the orientation given was excellent.

	No. of students	Percent
Excellent	131	68
Satisfactory	36	18
Deficient	28	14

The following table shows the frequency with which students asked for orientation or counseling from counselors, teachers, friends and other personal.

	No.	%
Guidance Counselors	158	54
Teachers	101	35
Schoolmates	21	7
Other personnel	11	4

Problems affecting students in the Center.

Problem	Frequency of occurrence as mentioned by the students
Drug addiction	82
Air Pollution	24
Transportation	23
Economic Help	22
Family Problems	9
Scholarship	5

Reasons for enrollment in the Center as stated by the students, and frequency.

Reason for entering the Center	Frequency
1. To finish high school program	31
2. To accelerate studies	14
3. To continue their studies	13
4. To improve economics conditions	8
5. To benefit from the opportunities offered by the Center	7

The following table shows how the students have improved their grades.

Answers	No. of students
very much	75
yes	46
fair	16
no	8
no answer given	50

760

7. Socio-cultural programs:

The socio-cultural programs preferred by the students are:

Activity	Frequency
Musical Activities	124
Conferences	53
Art activities	50
Special Day Celebrations	39
Movies	22
Excursions	19
Physical Education Activities	12

The information in this table demonstrates that the students are enjoying the socio-cultural activities and that they consider them as part of their school life.

8. Use of the audiovisual aids:

In the following table you can see how students and teachers used the audiovisual aids.

	Very Much	%	Average	%	Little	%
Students	107	59	43	24	31	7
Teachers	23	56	9	22	9	22

We can conclude that the use of audiovisual aids has to be intensified in the daily classes.

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9. Personality traits which better describe the teachers of the Center according to the answers of the students can be observed in the following table:

Trait	Frequency
1. Responsible	185
2. Friendly	175
3. Cooperative	161
4. Cheerful	161
5. Sincere	159
6. Respectful	144
7. Neat	136
8. Courteous	127
9. Well organized	101
10. Serious	94
11. Active	86
12. Humble	85
13. Studious	74
14. Religious	70
15. Affectionate	54

The teachers mentioned the following traits to describe the typical student of the Center:

Trait	Frequency
1. Friendly	33
2. Sincere	30
3. Cooperative	29
4. Talkative	28
5. Unstable	28
6. Kind	27
7. Skillful	23
8. Fond of sports	23
9. Irresponsible	19
10. Spoiled	13

10. The faculty

Fortythree teachers answered the questionnaire.

Their description is as follows:

a. Sex

M - 12

F - 31

b. Educational preparation

High School Diploma	4
Normal Diploma	1
B. A.	33
M. A.	5

c. Type of contract

Regular	36
Provisional	3
Special	4

d. Experience as teachers

1 - 3 years	20
4 - 12 years	17
11 or more years	6

e. Years working in the Center

One year	16
2 - 3 years	21
4 - 5 years	6

f. Number of groups per teacher

No. of groups	No. of teachers
1	7
2	2
3	1
4	5
5	17

Note: There are nine teachers working with curriculum and special activities. They are not in charge of groups.

g. Enrollment per group

Enrollment	No. of groups
10 students	1
11 students	2
15 students	2
18 students	1
20 students	4
25 students	7
26 students	3
28 students	7
29 students	1
30 students	4

i. According to the teachers the dropouts in the Center were as follows:

1. Academic courses

   a. First Semester--------- 39

   b. Second Semester------- 54

   Total in the year------ 93 = 8.61%

2. Vocational Courses

   There were 97 dropouts of 414 students.

   This represents 32.8% of the total enrollment.

The teachers and other personnel of the Center said that these students have economic problems because they get married early and have to get different jobs as soon as possible.

In general all the teachers of the Center said that the students have had positive changes in the cognitive and affective areas. They believe that the socio-cultural activities were of great educational value for the students.

11. The teachers evaluated the following items according to their experiences in the Center. Their evaluation indicates that the aims of this project are being well taken care of.

The following table shows the results:

Item	Always	Almost Every Time	Some-times	Never
1. My relation with students are cordial.	29	12	3	
2. There is an atmosphere of respect and friendship among the teachers of the Center.	29	12	2	
3. The administration of the Center takes into consideration the opinion of the teachers in regard to the teaching-learning and administrative aspects.	7	18	12	6

Item	Always	Almost Every Time	Some-times	Never
4. The administration consults and takes into consideration the opinions of the students.	5	12	24	2
5. The students seek help from the personnel whenever needed.	19	15	6	3
6. The majority of the time the students come to the teacher for orientation.	14	24	5	
7. As a teacher I am allowed to make innovations in the courses.	15	15	12	1
8. As a teacher I am aware of student needs.	14	12	12	
9. The administration helps me in solving discipline problems.	24	12	7	
10. I have plenty of time to prepare my classes-	7	13	18	
11. The students constantly ask for help with their academic disabilities	9	22	5	
12. The students' parents show interest in the future of the students.		4	29	7
13. The students of the Center show deficiencies in the basic skills.	8	15	17	4
14. The Center has accomplished the purpose of a laboratory and a learning center.	28	10	1	1
15. The majority of the students attending the Center seek economic benefits.	8	11	19	2

Item	Always	Almost Every Time	Some-times	Never
16. The majority of the students are attending the center because they didn't take advantage of the benefits in previous schools.	3	12	20	6
17. The students in the Center lose too much time.	1	5	27	8
18. The students in the Center cover the major part of the course of study	11	29	2	1
19. The program followed by the students prepares them to continue studies and to work.	23	12	5	1
20. The students have had the opportunity to participate in cultural and social activities	24	3	3	2
21. I have received systematic orientation in the implementation of my courses.	20	12	7	2
22. A positive change of attitude toward the school is shown in the students.	15	22	1	3
23. I have had the opportunity for training in new procedures and techniques.	21	11	9	
24. The students that come to the Center have personality problems.	8	17	15	1
25. There is a low motivation and interest on the part of students attending the Center.	2	10	17	10

12. Results of the questionnaire administered to counselors and social workers.

The results obtained from the questionnaire administered to counselors and social workers are as follows:

A. Personnel who answered the questionnaire

1. Vocational Counselors---------------- 6
2. Social Worker----------------------- 1

B. Academic Preparation

M.A.---------------------------------- 3
B.A.---------------------------------- 1

C. Experience in their work

1. As teachers

1 - 5 years---------------------- 2
6 - 10 years--------------------- 3
10 or more years----------------- 1
No experience as teacher---------- 1

2. As vocational counselors

1 - 5 years---------------------- 3
6 - 10 years--------------------- 2
More than 10 years--------------- 1

3. As social worker - Only one answered the questionnaire.

She has three years of experience.

D. Kind of contract

Permanent-------------------------------- 5

Provisional------------------------------ 2

E. Services offered by this personnel:

The following are the services offered by this personnel:

1. followup to the students
2. individual counseling to students
3. general vocational and academic orientation
4. finding part-time and full-time jobs for the students
5. group counseling
6. case studies

F. Interviews with students

According to the questionnaire, this personnel carried out interviews with students as follows:

Grade	Number of interviews
10th	230
11th	380
12th	215
Post graduates	150
Commerce & vocational courses	300
Others	100

These students need more help than the average high school student in the other high schools of the island. This is why so much personnel is needed to help them.

Means used by this personnel to know the students individually are:

a. results of tests and questionnaires

b. students' records

c. individual observation and all information available that can be used to have a better idea of each one.

All this information is confidential. It is added to as the student is interviewed and given individual orientation. These students need to be heard and their worries, necessities and problems must be discussed with them.

They need to be loved and this service offers them security and the feeling of knowing that they are useful.

This personnnel helps the students to analyze information of interest to them. They put them in contact with the courses offered in the Center, especially the vocational ones, so that they can see the job in function and in this way they can determine if they like the work.

Other means used are: pictures about the jobs they will like, visits to the places where these jobs are carried out and a special course offered with this aim in the Center.

G. The Center carried out different activities to help these students to know themselves. These activities are planned in coordination with homeroom teachers, the vocational counselor, the social worker and the other teachers of the team.

The following are some of the themes that have been discussed during this year:

1. How do I see myself?
2. How do other see me?
3. What do I know about myself?
4. What I don't know about myself?
5. What are my goals as I see them?
6. What are they really?
7. What am I doing to achieve my goals?
8. What else do I need to do?
9. How do I study?
10. How well do I study?
11. How can I improve?
12. What are my abilities?
13. What can I do to develop my abilities?
14. What are the abilities that I don't have?
15. How do I know it?
16. What do I do for others?
17. What do others do for me?

18. What can I do for others?

19. What are my values and attitudes?

20. What are the values and attitudes of others?

21. How can we improve these attitudes?

The vocational counselors and the social worker say that they work as a team trying to find out the better ways to help the students in the solution of their problems.

Other opinions presented by this personnel in the questionnaire are:

   a. They have no difficulty in performing their work.

   b. The Center is achieving its goals totally.

   c. They like to work in the Center.

13. By means of a questionnaire administered to the directors of the Center the following data was obtained:

   a. The selection of the students was done according to the criteria established by the Center.

   b. Fifty students came from the United States during the school year 1972-73. The Center offers the following special activities for these students:

      1. Language laboratory with curriculum materials prepared especially for them.

      2. Grouping for individual attention.

3. Remedial Spanish classes.

4. Tutorial system using teachers and students.

c. The enrollment for the year 1972-73 was as follows:

First Semester

Grade	M	F	Total
X	107	82	189
XI	142	82	224
XII	73	32	105
Vocational Courses	116	161	277
Total	438	357	795

Second Semester

Grade	M	F	Total
X	76	37	113
XI	131	89	220
XII	117	77	194
Vocational Courses	139	165	304
Total	463	368	831

Note: For the academic courses the enrollment of each semester corresponds to a year's work, but in the vocational courses the enrollment of the two semesters corresponds to only one year.

Average Monthly Attendance

Month	Enrollment	Attendance
August	795	669.24
September	795	713.81
October	795	646.89
November	795	601.16
December	795	644.72
January	831	586.73
February	831	634.09
March	831	629.91
April	831	609.58
May	831	681.99

d. Ninety-seven students obtained their high school diploma at the end of the first semester of the 1972-73 and one hundred seventy-eight at the end of the second semester.

e. The Center receives students with little or no economical resources and it is necessary to help them economically. This help permits them to pay transportation and other basic needs.

The amounts received per student vary from $10.00 to $30.00 monthly.

The following table shows the help received in each school semester:

August - December 1972

Grade	$10.00	$15.00	$20.00	$25.00	$30.00	Total
X	115	21	1	17	1	155
XI	142	31	10	10	1	194
XII	46	30	4	13	4	97
Voc. Courses	272	4	1	5	3	285
Total	573	86	16	45	9	731

January - May 1973

Grade	$10.00	$15.00	$20.00	$25.00	$30.00	Total
X	44	23	10	6	1	84
XI	103	46	2	18	3	172
XII	128	31	12	10	2	183
Voc. Courses	260	23	5	9	3	300
Total	535	123	29	43	9	739

f. Organization

The Center is organized in single enrollment with schedules six hours daily. Some students begin their classes end at 2:40 P.M.

g. Personnel

1. During the school year 1972-73 the Center functioned with the following personnel:

   a. Administrative Personnel------------ 4

   b. Academic Teachers----------------- 31

c. Vocational Teachers ------------------ 17

d. Social Workers----------------------- 2

e. Vocational Counselors----------------- 6

Total----- 60

2. The academic personnel is distributed as follows:

a. Spanish teachers--------------------- 5

b. English teachers--------------------- 6

c. Social Studies teachers---------------- 6

d. Mathematics teachers----------------- 3

e. Science teachers--------------------- 3

f. Health teacher----------------------- 1

g. Physical Educ. Teacher--------------- 1

h. Music teacher----------------------- 1

i. Art teacher-------------------------- 1

j. Librarian---------------------------- 1

k. Audio-visual Coordinator-------------- 1

l. Curriculum technician----------------- 1

Total------ 31

The vocational personnel is distributed in the following way:

a. Commerce------------------------- 6 teachers

b. Interior Decoration------------------ 1 "

c. Cafeteria--------------------------- 1 "

d. Sewing---------------------------- 1 "

e. Marketing------------------------- 1 "

f. Electronic Equipment Operator--------- 1 "

g. Cosmetology----------------------- 1 "

h. Barber Shop----------------------- 1 "

i. Radio and T.V.--------------------- 1 "

j. Plating--------------------------- 1 "

k. Sewing machine mechanic------------- 1 "

l. Tailor shop------------------------ 1 "

m. Welding--------------------------- 1 "

n. Orientation for the world of work
(Vocational counselor)--------------- 1 "

Total-- 19

The table that follows shows the academic preparation of the personnel:

Area	M.A.	Prof. Diploma	B.A.	Normal	Univ. Credits	High School	Total
1. Academic	4	–	25	2	–	–	31
2. Vocational	–	–	9	–	2	6	17
3. Counseling	2	2	2	–	–	–	6
4. Social Work	1	–	1	–	–	–	2
Total	7	2	37	2	2	6	56

The experience of the personnel is shown in the following table:

Area	Experience in number of years					
	0 -	1 - 3	4 - 7	8 - 10	11 +	Total
Academic	6	15	4	1	5	31
Vocational	1	8	5	-	3	17
Counseling	-	-	1	1	4	6
Social Work	1	1	-	-	-	2
Total	8	24	10	2	12	56

Contracts of the personnel are as follows:

	Contract			
Area	Perm.	Prob.	Prov.	Total
Academic	9	3	19	31
Vocational	-	-	17	17
Counseling	5	1	1	6
Social Work	-	-	2	2
Total	14	3	39	56

Personnel ages are as follows:

	Age					
Area	21 - 25	26 - 35	36 - 45	46 - 50	51 +	Total
Academic	13	12	5	1	-	31
Vocational	5	5	5	1	1	17
Counseling	-	1	5	-	-	6
Social Work	2	-	-	-	-	2
Total	20	18	15	2	1	56

Sex of personnel is shown in the following table:

	Age					
Sex	21 - 25	26- 35	36 - 45	46 - 50	51 +	Total
Women	16	13	12	1	1	43
Men	4	5	3	1	-	13
Total	20	18	15	2	1	56

h. Evaluation of the students

1. The following criteria are used to evaluate the work of the students:
    - a. Tests
        1. General ability
        2. Diagnostic
        3. Achievement
    - b. Daily attendance
    - c. Questionnaires
    - d. Daily contributions in classes
    - e. Contributions to school and community

i. The table that follow shows the grade distribution by academic classroom teachers of the Center from August to December 1972:

Grades Distribution

Academic Area

First Semester 1972 - 73

Group	A	%	B	%	C	%	D	%	F	%	Total %	Total Enrollment
Spanish 10	28	16	67	38	59	33	14	8	10	5	100	178
" 11	17	14	32	26	54	45	16	14	2	1	100	121
" 12	6	6	26	26	43	43	21	21	4	4	100	100
English 10	24	14	50	29	61	36	22	13	13	8	100	170
" 11	28	15	63	35	56	31	30	16	5	3	100	182
" 12	22	19	32	29	38	35	20	17	0	0	100	112
General History	12	6	47	26	83	46	30	17	9	5	100	181
History of P.R.	22	13	51	30	71	43	20	12	4	2	100	168
History of U.S.	21	21	31	31	35	35	11	11	2	2	100	100
Sociology	12	8	73	48	45	30	17	11	5	3	100	152
Biology	10	5	49	25	81	41	42	20	18	9	100	200
Chemistry	9	18	20	40	19	39	0	0	1	2	100	49
Algebra I	17	10	46	27	62	37	30	18	13	8	100	168
Geometry	23	15	37	24	62	41	27	18	4	2	100	153

	A	%	B	%	C	%	D	%	F	%	Total %	Total Enrollment
Art	24	33	50	37	21	16	17	13	2	1	100	134
Music	28	31	40	43	21	23	2	2	2	1	100	92
Health	29	23	64	50	29	23	4	3	1	1	100	127

j. Statistical Summary of the Results of the Standard Test:

	General Ability Test - Form B Level 4	Spanish-Reading Test-Interamerican Series - Level 5	Reading Test Interamerican Series - Level 5
99 - 75	129 - 25%	41 - 8%	21 - 7%
74 - 50	147 - 29%	93 - 18%	51 - 15%
49 - 25	125 - 24%	122 - 24%	70 - 20%
24 or less	114 - 22%	252 - 50%	203 - 58%
Total	N 515-100%	N 508 -100%	N 345 -100%

Score	1971 - 72		1972 - 73		Total	
	N	%	N	%	N	%
3,500 - 4,000	3	2.65	0	0	3	1.31
3,000 - 3,499	2	1.77	2	1.74	4	1.75
2,500 - 2,999	12	10.62	15	13.04	27	11.84
2,000 - 2,499	48	42.48	57	49.57	105	46.05
1,500 - 1,999	45	39.83	37	32.17	82	35.97
1,000 - 1,499	3	2.65	4	3.48	7	3.07
Total	113	100%	115	100%	228	100%

k. Curriculum Center

The faculty has received orientation from the directors and from other professionals in the preparation of modules for the teaching-learning process of the academic subjects. They have prepared lessons for the different subjects for grade ten. They are planning to prepare lessons for grades eleven and twelve. In this way they can individualize instruction and teach according to the needs and interest of the students. Four curriculum technicians are working in the curriculum center.

1. Problems and difficulties presented by the directors
   a. Type of contract offered to teachers.

      This personnel is contracted on an annual basis. Their status is a provisional one and the project doesn't provide for retention of good teachers. When they are already oriented according to the project goals, they abandon the Center trying to find a better position in the public schools district that offers them security.

   b. Administrative procedure to appoint personnel:

      The project personnel is appointed using the same administrative procedures as in the regular program. No special attention is given to the project. In some cases the Center has waited for five or six months to fill vacant positions.

   c. Budget

      Because of the uncertainty about the annual budget the personnel is insecure and unsure of their positions and this affects the functioning of the project.

XI. Conclusions

1. The Buchanan Educational Opportunities Center has established a real innovative program which can be a solution for the educational problem of the Puerto Rican youth, especially for high school education.

2. After analyzing the information above, we arrived at the following conclusions:

   a. The criteria used to select the students were followed as the proposal suggested.

   b. The percentage of school desertion was low for the present school year, considering the type of student received in the Center.

   c. The vocational offerings have increased. In this way they are trying to achieve the proposal goals.

   d. The medical services need to be improved. The directors are planning this for next year.

   e. The counseling services are excellent. The same vocational counselor follows up the student's work from grade ten to twelve.

   f. The teachers are not sure of their position in the Center. There is no opportunity for permanent work in this project.

   g. The teachers ask for better pay.

   h. The twelfth grade students are having better plans for the future.

   i. The co-curricular and extra-curricular activities resulted in great interest by the students.

j. Most of the students enrolled in the Center are trying to finish their studies in a short time.

k. The director is making great efforts to adapt the curriculum to the needs and interests of the students. The work of the Curriculum Center for grade ten has been satisfactory.

l. The Center is giving emphasis to the use of audiovisual aids.

X. Recomendations

1. The efforts for individualizing the teaching-learning process must be continued. The curriculum center should continue with its aims. They can revise the lessons already prepared for grade ten and new lessons must be prepared for grades eleven and twelve.

2. Emphasis on the use of audiovisual aids must continue. The technotronic equipment should be repaired. The Department of Education should provide maintenance for this equipment. The Center should offer more training to the teachers and students in the use of this equipment.

3. The selection of teachers for this project must be improved so that they can be secure in their positions. In this way the mobility of teachers can be reduced and they can continue working with the students next year.

4. The standard tests administered to the students must be revised. There are new tests which have not been used during this year. The Center needs help from the Coordinator of Evaluation of Guaynabo School District.

5. The project is accomplishing the desired results and in case the Title III funds are no longer available the Department of Education should do its best or all possible for its continuation.

EVALUATION REPORT

FINE ARTS LABORATORY FOR IMPROVING THE QUALITY OF INSTRUCTION

Mini- Grant # 9

787

Report on Proposal No. 9 (Mini-project)

Fine arts Laboratory for Improving the Quality of Instruction

District-Rio Piedras B

School-Las Mercedes

Enrollment -391

Teachers working in the proposal -12

I- ATTAINMENT OF OBJECTIVES

Although the objectives are not outlined in operational form, there is evidence of progress by the clientele. The principal along with the art coordinator and the teacher gave evidence of the work that had been performed. A visit to the classroom supported this evidence. Nevertheless, there is no specific statement on what they propose to achieve nor the time to be dedicated to each stage planned.

II- ACTUAL STATE OF THE PROPOSAL

Actually, the proposal is involved in the following phases:

a. Relate the classroom teacher with the art class. A study, subject by subject, was made of all the skills in each subject so the art teacher could plan on the basis of the skills to be developed, especially in Language Arts, and in this way enrich the curriculum.

This coordination of subject skills and art is in it's initial stage.

III- PROJECTIONS

Plans are to evaluate and verify results of the project in Las Mercedes School, to begin adaptation of the project in a few schools and later extend it to all the district. The transfer has already begun to the Gándara School.

IV- EQUIPMENT AND MATERIALS

The equipment and materials received by the school have been used to full extent. Nevertheles, there are a few occasions when it could have been used better.

V- RECOMMENDATIONS

1. Before begining a mini-proposal, all personnel should be oriented in the following areas:
    a. writing the proposal
    b. how to make a proposal that will achieve the objectives
    c. implement the proposal to assure achievement of objectives
    d. continual evaluation of the proposal
2. Administrative personnel in the district should understand the proposal and maintain a follow-up.
3. Better lines of communication among personnel of Central Office, the region and district should established, especially among those directly working with the proposal.

VI- IMPRESSIONS ABOUT THE PROJECT

1. Although the writing of the proposal is not up to the standards of the guideline, there are definitely some achievements with the clientele

REPORT OF SOCIAL WORKER

1971-1972

PROJECT # 5

Psychotherapy Group

3 groups for 7 months (characteristics)

9
12
11
32 total

Monthly report of school Social Worker

March 1972

56 total active cases

Health attended

	Referred
22	79

Psychometric tests

18

Clinical psychiatric treatment

2

Cases opened in Social Services

15 2) Foster home

Shoes 78

Emergencies

(No case opened)

Meeting with parents-Interviews

August 15	October 8
September 16	November 7

December	4
January	3
February	5
March	6
	64 + 46 with parents of mentally retarded

Visits received

Social Services	27
Police	2
Evaluation	2
Head Start	2

Study of Problems or needs of school

Helped with project evaluation with students

Mrs. Vázquez--Mrs. León--Mrs. Muñiz

Study

Characteristics of Possible Dropouts
(all students)

Follow up work on 8-3 group

6 students

1 night

1 day

4 dropouts

Training to teachers on Social Work Program

Group orientation topics

8-1 -3 orientation

7-1 -2 orientation

Absences

Monthly reports from teachers

Home visits

493

Referrals to Vocational Rehabilitation

2 from the community

Interviews

721 elementary

938

217 junior high

Psychometric test administered

1. Emilio Torres David- RM 62
2. Luis A. Cotto Martínez- RM 68 special group
3. Ramón A. Ferrer Soto- R-Psychiatric Clinic
4. Adrián García Ortíz- R-62 (moderate) special group
5. Lindi Ivette Sánchez Conde- N
6- José M. Cruz Ortíz- 75 slow rhythm
7. Carlos Velázquez Torres R-59 (special group)
8. Oscar Martínez Sánchez
9. Francisco Rodríguez Baéz 60-R- Cannot respond at higher levels

* Transfer

1. Eugenio Rivera Martínez

10. Luis E. Mangual Rivera 62 special group

11. Reinaldo Santiago Agosto- Ref. to Pediatrician

12. Pedro O. Nuñez- 72 5to grade-Bordeline

13. Miguel A. Roche Clavell (sex)

14. Ramón L. Roche Ambert- 79 to lower grade

15. Melvin Torres Vázquez- 76 to lower grade

16. Rafael Casiano Bermont-normal

17. Jenny Maldonado Rivera-R

Candidates for Psychometric Examination

1. Rafael Santini Soto
2. Héctor L. Rivera Colón
3. Luis A. Marrero Morales
4. Orlando Maldonado Malavé
5. Victor M. Pérez Baéz
6. José L. Rodríguez Torres
7. Félix L. Santini Soto
8. Jerry L. Watley Vázquez
9. Luiz A. Vega Morales
10. Wanda Malavé Zayas
11. Margarita Santiago

Cases under Social Studies

1. Enrique Martínez Rodríguez
2. Sonia Baéz Negrón
3. Edith Baéz Negrón
4. Rafael Santini Soto
5. Haydee Burgos
6. Juanita Santini
7. Carlos Velázquez Torres

8. Virginia Rodríguez
9. Francisco Rodríguez Baéz
10. Luis A. Marrero
11. Melvin Torres Vázquez
12. Félix Santinio Soto
13. Lilliam Padilla
14. Evangelina Meléndez
15. Basilia Meléndez

Foster home

Shoes given to:

1. Adelaida López
2. Juanita Santini
3. Angelica Espada
4. Joselito Espada
5. Juan José Espada
6. Sonia Baéz
7. Edith Baéz
8. Rafael Santini
9. Virginia Rodríguez
10. Orlando Malavé

Treatment in Psychiatric Clinic

1. Luis A. Mangual
2. Ramón A. Ferrer

Referred to Vocational Rehabilitation

1. Ana S. Espada
2. Esteban

Skills groups

1. Luis E. Mangual
2. Evangelia Meléndez
3. Luis A. Cotto
4. Adrián García chronic absences
5. Carlos Velázquez Torres
6. Francisco Rodríguez -R

Require slow rhythm and repetitive learning

1. Reinaldo Santiago
2. José M. Cruz

Healthe Cases-year 1971-1972

Elementary and Junior High

1. Félix J. Morales 7mo. -sight-unattended
2. Luis E. Mangual Rivera -5to -Pediatrician to take care
3. Reinaldo Santiago-6to Pediatrist-unattended
4. Jorge Cortés-3rd sight and hearing-unattended
5. Lindibeth Sánchez-8th-General Taken care of
6. Luis A. Cotto-sight -4th unattended
7. Jorge L. Rivera -paralysis
8. Gerardo Maldonado facial paralysis taken care of
9. Ramón L. Roche-2nd-hearing -taken care of

10. Carlos L. Roche -6th legs-unattended

11. Marcelino Pérez-Gen. unattended

12. Raymond Roche-sight-unattended

13. Miguel Esmurrias-dentist-7mk. Taken care of

14. Héctor L. Rivera-3rd. T. B. unattended

15. Santos Inés Garcías -heart-4th grade taken care of

16. Andrés Vega -2nd. sight-taken care of

17. Bernardo Sánchez-hearing -6th taken care of

18. Angel Sánchez

19. Carlos Pabón-8th sight-taken care of

20. Luz S. Negrón-4th sight taken care of

21. Natividad Negrón-6th bones-unattended

22. Miguel Roche-2nd. neurologist -unattended

APPENDIX #2

Impact of assigining special resources in Project #5

2a. School organization and enrollment

2b. Sample of permit for student participation in sports

2c. Distribution of resources and participating clientele

SCHOOL CLUBS, SPONSORS AND MEMBERSHIP

SPONSOR	ORGANIZATION	MEMBERSHIP
Miss. Font	Future Homemakers	51
Mrs. Debin	Elementary English Club	20
Mrs. Torres	Jr. High English Club	25
Mr. Mercado	Athletic Association	15
Mrs. Santiago	Library Club	12
Mr. Rodríguez	Tuna	20
Mr. Echevarría	School Patrol	40
Miss. Lugo	Red Cross	30
Mrs. Vázquez	Dramatic Arts	65

MEMBERS OF DRAMATIC ARTS CLUB

GIRLS

1. Nitza M. Zayas
2. Wanda I. Cruz
3. Gladys Rivera
4. Joaquina Torruella
5. Liduvina Torres
6. Judith Flores
7. Sharon E. Zayas
8. Edda M. Torres
9. Cándida Jimenéz
10. Olga I. Sánchez
11. Nancy Morales
12. Ivette Burgos
13. Nilda I. Bajanda
14. Madeline Rubert
15. Ivette Rentas
16. Luz Elenia Rodríguez

BOYS

1. Francisco Sánchez
2. Raymond Espada
3. Héctor Emilio Ortíz
4. Jaime Torres
5. Pedro J. Torres
6. Edith Figueroa
7. William Rivera
8. Jorge J. Maldonado
9. Francisco García
10. Edwin Plaza
11. José A. Santiago

AUDIOVISUAL

9-1

1. Edwin Rodríguez
2. Efraín Malavé

9-2

1. Iván Torres
2. José Actavio Quiñones
3. Víctor M. Cotto
4. José Angel Mercado 8-3

PUPILS IN THE PLAYITA CORTADA TUNA

1972

Señor Rodríguez:

1. Mirna Pagán
2. Francisco Reyes
3. Malta Pérez
4. Nancy Morales
5. Elsa Negrón
6. María E. Malavé
7. Yolanda García
8. Cecilia Santiago
9. Jaime Torres Colón
10. Elizabeth Borgos
11. Adalitza Irrizarry
12. América Colón García
13. Evelyn Avilés
14. Maritza Santiago
15. Nilma García
16. María del C. Maldonado
17. Nilda Bajanda
18. Idellisse Rodríguez
19. Lilliam Bello
20. Vilma I. Pérez
21. Migdalia García
22. Ramón Rivera
23. Luis A. Maldonado
24. Silvia Borrere
25. Ilsa Santiago

PLAYITA DE CORTADA S. U.

SCHOOL DISTRICT

SANTA ISABEL

LIST OF PUPILS IN SALINAS SECTIONAL BASEBALL

OCTOBER 7, 1972

1. Waldo Toro
2. Ismael Rivera
3. Jaime Torres
4. Iván Torres
5. José O. Quiñones
6. Luis A. Santiago
7. Elí C. Acosta
8. William García
9. Fernando Rubert
10. Victor Cotto
11. Angel Reyes

Superintendent of Schools

Director

PLAYITA DE CORTADA S. U.

SCHOOL DISTRICT

SANTA ISABEL

List of pupils going to Juana Díaz next Saturday, October 21, 1972, to play in the sectional baseball tournament, elementary level

1. José L. Santini
2. Luis A. García
3. José A. Burgos
e 4. Fernando Rosas
5. Melvin Cruz
6. Fernando Santiago
7. Jorge González
8. José A. Zayas
9. Manolín Torres
10. Samuel Quiñones
11. Luis Cedrez
12. Javier Santiago
13. Axel Rodríguez
14. Edwin Negrón
15. Juan K. de Jesús

Superintendent of Schools

Director

FOLLOWUP OF STUDENT FROM THE PLAYITA DE CORTADA SECOND UNIT NINTH GRADE

I- 1971-1972		No.	%
1. Total promoted		69	100%
2. Studying		66	95.6%
3. Not studying		3	4.3%
II- Studying			
1. General Course		23	34%
2. Commercial Education		19	29%
3. Vocational Education Grades and Industry	Total	24	36%
		66	
III- Other activities			
1. Housewife		2	
2. United States		1	

A- Continued studying

Year	
1969-1970	91.9%
1970-1971	95%
1971-1972	95-6%

B- Did not continue

Year	
1969-1970	8%
1970-1971	5%
1971-1972	4.3%

Persons taking high school equivalency test

November 6, 1971

1. Velázquez Malavé Zoraida
2. Nilda Santiago Negrón
3. Ruth Dilia Avilés Alvarado
4. Caré A. Bermúdez Negrón
5. Eurípides Rodríguez Santiago
6. Candido Pérez Ortíz
7. José A. López Torres
8. Enrique Bermúdez
9. Hilda Luna Figueroa
10. Saro Gonzàles García
11. Justa Clavell Colón
12. Julia Cruz Zayas
13. Eduardo Espada Soto
14. Herminio Matos
15. Gloria E. González Santiago
16. Norma Iris Rentas Bird
17. Iris Yolanda Rivera Flores
18. Colón Ortíz Gladys E.
19. Elba Nydia Aguirre Rivera
20. Benjamín Sotomayor
21. Victor Ortíz Echevarría
22. Mirna Velázquez González

DISTRIBUTION F RESOURCES AND PARTICIPATING CLI ELE

NAME	POSITION	PREP.	EXP.	1	2	3	4	5	6	7	8	9	Total
Hilda E. Rosas	Coordinator	M.A.	11 years										
Ana L. Muñoz Bermúdez	Social Worker	B.A.	5months										
María C. García	Vocational Counselor	B.S.	5months										
Raúl Otero Rodríguez	Industrial Art Teacher	B.A.	1 year							78			78
Luz. M. Rivera Soto	Teacher aide	-N	2 years										
Noemí de Jesús	Teacher aide	N	1 year	34									34
Santa Soto	Teacher aide	B.A.	2 years			36		15					51
Nancy Colón Vázquez	Teacher aide	-N	2 years		33								33
Cándida Molina Torres	Teacher aide	-N	0	32									32
Rubén Rodríguez	Music Teacher	N	1 year	66	71	72	83	63	80	108	73	86	702
Manuel Tirado	Physical Ed. Teacher	B.A.	1 year	66	71	72	83	63	80	108	73	86	702
Judith González	Reading Skills Teacher	-N	1 year					63	41	76			
Zulma I. Aponte	English Skills Teacher	N	1 year		38	36	83					38	38 149
Alida Soto Montes	Writing Skills Teacher	N	1 year										
Vilma E. Santiago	Mathematics skills Teacher					36		63					99

ARECIBO EDUCATIONAL REGION

ARECIBO, PUERTO RICO

VALIDATION REPORT

For Project #8 : Itinerant instructional and special services for areas cultural disadvantage, in the Ciales Demonstration District, Title III, Law 91-230.

Submitted by the Validation Committee

1. Edna González
2. Iris N. Jiménez
3. Isabel Martínez
4. José S. Otero
5. Aquilino Pérez
6. Alicia Iguina
7. Rosa H. González
8. Leticia S. Mieles
9. Ramón Aguilú
10. Betty Debién
11. Haydeé Díaz de Román
12. Annie Arteaga
13. Cándida A. Ortega

January 10, 1973
Arecibo Educational Region

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I. Description of project

Ciales is a school district located in the Cordillera Central of Puerto Rico, whose topography is mountainous and steep. Climatic conditions, lack of transportation and communication, among other factors, limit educational activities, principally in isolated schools.

A study made in August 1969 showed a great difference in educational opportunities existed between the urban and rural zones. Project #8 sprang from a need to eliminate or to reduce this difference in curricular offerings between the two zones.

This project uses a strategy of itinerant human and physical resources that carries educational and specialized services of remedial reading, art, music, physical education, library and counseling to all urban and rural zones.

In the classroom there is a dual process of professional improvement for the regular teacher and of developing the teaching learning proces of the pupils.

The itinerant services as well as the process of inservice professional training for the teachers in remedial reading, music, art, physical education and library services are basic elements in this project.

Special resources work daily with three or four groups of pupils. They go back and forth between schools some three to

40 kilometers apart.

This projects proposes to increase to the greatest extent possible the curriculum offered in those schools not having the above listed services or because of being located in isolated areas are at a disadvantage with the urban zone in what can be offered.

Project #8 has contributed to a great degree to solving the educational problem of the isolated zones in the Ciales School District.

II. Project objectives

At the end of the three years of the project :

- we will have succeeded in retaining a minimum of 85% of students in the elementary level in urban and rural zones and retention in junior and senior high school will have increased to a minimum of 90%.
- every student participant in the project will have succeeded in raising his reading level in Spanish by one to three grades as determined by reading tests given at the beginning of the project and, especially in the Pozas, Cialitos, Portón and Divisoria schools, the same in phonetic levels according to tests given at the first of the year
- we will have prepared 90% of the regular and provisional teachers in the techniques of remedial reading, art, music

and physical education

- we will have extended the school day by one hour for junior high students and an hour and a half for senior high students through the extension of library and tutoring services
- by offering art, music, physical education and library services to elementary level pupils, they will have enjoyed rich, varied and significant experiences that formerly were not available to them.
- counseling services will be provided for those schools that formerly did not have these.

III. Achievements to be verified

1. The concept of itinerant services (teachers, library and counselors) as a possible solution to a lack of personnel, physical plant and unequal educational opportunity to pupils and teachers in the rural zone.
2. The use of student tutoring other students helps the latter with academic problems.
3. Improvement in the control of reading skills by the clientele as a direct result of the project.
4. Effective use of all kinds of resources
5. The process of planned development by stages of different aspects to maximize the possibilities of these (example : organization).

6. Active participation of the private school in Title III projects.

7. High indices of school retention as a direct result of the project.

8. Production of educational materials and/or experiences specially designed for overcoming deficiencies in reading in those pupils so characterized, for enriching the curriculum in art and music and for strengthening library services.

9. Inservice training different from the usual without taking the teacher from the classroom (learning to do by doing).

10. Marginal achievement :

    a. Inservice training for principals

    b. Development of leadership among the pupils

IV. Procedures used in the validation process

A. Techniques and methods used to gather evidence

On October 20, 1972, the Validation Committee, selected at regional level, received orientation from personnel of the Division of Educational Evaluation and Development on the validation process to be carried out in the Ciales Demonstration District. Later this committee was expanded to include personnel from the Central Office level.

The following techniques were used by this committee :

1. Meetings to

    a. study and analyze guide-lines received from the Division of Educational Evaluation and Development

  - b. map out a plan of action
  - c. study Project #8
  - d. exchange impressions with district personnel for
    - (1) informing them on purposes and procedures in validation
    - (2) clarify and specify precisely achievements
    - (3) share basic information on the project (clientele involved, problems encountered, etc.)

- 2. Visits to
  - a. schools
    - (1) Pesa Second Unit
    - (2) Jaguas Santa Clara
    - (3) Frontón Second Unit
    - (4) Cordillera
    - (5) Pozas Llanadas
    - (6) Pozas Manicaboa
    - (7) Cialitos Portón
    - (8) Cialitos Centro
    - (9) Urban Senior High School
    - (10) Urban Junior High School

b. homes of some of the students participating in the project.

3. Interviews with
    a. students
    b. parents
    c. school principals
    d. Director, Title III projects
    e. project coordinator
    f. superintendent of schools
    g. itinerant counselors
    h. drivers
    i. librarians
    j. teachers of
        (1) reading skills
        (2) art
        (3) folk dancing
        (4) physical education
        (5) classroom
    k. regional planner
    l. local planner
4. Observation of
    a. classes where the skills teacher and the regular teacher worked together in teaching a class.
    b. use of audiovisual materials and equipment

    c. itinerant services in action
    d. surroundings of schools where the itinerant counselors were working
    e. functioning of the unit of library services
    f. classes where the resources teachers (art, music and physical education) worked together in developing a class
    g. materials produced in the project. (See at the end of this report the list of materials produced in the district)

B. Documents examined

  1. Proposal #8
  2. Documents from school year 1969-70
  3. Comparative table on reading progress in phonetic levels by pupils in remedial reading.

     Reading situation in 2nd to 6th grades

     Analysis of test on speed and comprehension in 7th grade

     Information on the preparation and experiences of teachers working as resources in reading

     Itineraries of reading resources

     Resume of enrollment in remedial reading

     Schedules of remedial reading resources

     Reading situation in 3rd, 4th and 5th grades in relation to the books in the Basic Reading Series

Table showing number and percent of students below grade level in reading in 3rd to 6th grades

Study of factors conditioning the development of language arts skills

Comparative table by schools of test results from 3rd to 6th grades

Statistics on the remedial reading program (others)

Tests on phonemes

Results of oral grading tests

Classifying of students by reading levels

Resume and analysis of oral reading tests

Resume and analysis of comprehension tests

Study of district enrollment by schools, levels, zones and teachers

Work itinerary of the itinerant library

Tentative program of resources in art, music and physical education

Study of the number of teachers by schools and zones

Program of library activities

Work itinerary of physical education resource

Work itinerary of music teacher

Work itinerary of art teacher

Weekly program of each resource

Number of pupils benefited in each aspect of Project #8

Itinerary of visits and daily programs

Folk dances taught

Principal duties of instructional personnel in Project #8

Hours and days of work of the itinerant counselors

Report of schools in the Ciales School District where the counselors offered services

List of materials produced under Project #8

Reactions and impressions of teachers who worked with the reading resources

Teacher training in physical education

Annual report on Title III project

Teacher evaluation of the art program

Teacher evaluation of the remedial reading program

Evaluation of the service through the extended schedule of the library and of tutoring services

Report of work performed by tutors in the Ciales Senior High during first semester

Annual report on extended library services in the Ciales Junior High School

Potential student failures in 1969 - 70 who were helped by tutors

Dropouts, not transferrals, elementary and secondary levels, 1969 - 70

Planning process, Title III

Statistical reports on itinerant resources

Table showing number and percent of students below grade level ; elementary level, 3rd to 6th grades

3. Documents for school year 1970-71

Final report on Project #8 music program, individual study by students

Reading situation, 1970-71

Enrollment in remedial reading, 1970-71, by schools and grades

Itinerary of resources

Enrollment in reading that needs psychometric evaluation

Pupils enrolled in remedial reading who were given psychological evaluation

Study of personal and progress information on students in the remedial reading program

Comprehension tests to students passing to 7th grade

Evaluation of progress in oral reading May 1971

Test on phonemes, 1970-71

Test on comprehension in silent reading

Progress in phonetic levels

Analysis of reading of sounds

Attendance at remedial reading

Analysis of test on phonemes

Classification of pupils by reading levels

Test in oral reading

Pupils in remedial reading not working at capacity in their subjects

Study of district enrollment by schools, levels, zones and teachers

Work itinerary of mobile library

Tentative program of art, music and physical education resources

Program of library activities

Work itinerary of physical education resource

Work itinerary music teacher

Work itinerary of art teacher

Weekly program of each resource teacher

Number of pupils benefited in each aspect of Project #8

Itinerary of visits, programs and daily programs

Folk dances taught

Principal duties of Project #8 instructional personnel

Hours and days worked by itinerant counselors

Report of schools in Ciales School District where the counselors offered services

Meetings held with teachers and principals active in Project #8

Study of teachers meeting orientation on reading diagnosis and correction

Program of visits to resources and principals by local and regional personnel

Orientation on reading diagnosis

Upgrading of resources, teachers and principals participating in Project #8

Teachers working in remedial reading who have not had training in audiovisual equipment

Plan of work for activity month for remedial reading resources

Plan of work for the summer in Buchanan (library)

Plan of work for the summer in Buchanan (music)

Reactions and impressions of teachers who worked with reading resources

Reaction of teachers given training in reading diagnosis

Teacher training in physical education

Anual report, Title III Project

Evaluation by teachers of the art program

Evaluation by teachers of the music program

Evaluation by teachers of the physical education program

Report of work by tutors from the Ciales Senior High

School during first semester

Report of work by tutors from the Ernesto Valderas Junior High School, Ciales, during first semester

Opinion from some teachers on use of student tutors

Study of number of students handled daily by the tutors

Annual report on library services in the Ciales Junior High

Potential student failures in 1970-71 who were helped by tutors

Study of tutor services in the Juan Ríos Serpa School

Questionnaire for students receiving tutorial services

Program of activities of teacher aides

4. Documents for school year 1971-72

Report on dropout by schools, grade and sex, 1971-72

Comparative chart on dropouts for 1970-71 and 1971-72

Comparative chart on dropouts by school nuclei

Report on dropouts so as to give followup on the remedial reading enrollment

Report on monthly attendance of remedial reading enrollment, 1971-72

Tabulation of reading test, situation and comprehension by nuclei and grades, 4th, 5th, and 6th

List of teachers working under contract

Comparative table on progress in phonetic levels of pupils in remedial reading, 1971-72

Report on enrollment in reading needing psychometric evaluation

Progress reports on remedial reading by teachers, 1970-71 and 1971-72

Work program of remedial reading resources

Report on pupils in remedial reading on whom a psychology evaluation was made

List of pupils enrolled in remedial reading who did not return

List of students enrolled in remedial reading promoted to 7th grade

Location of classroom teachers with whom remedial reading resources worked in 1971

Enrollment in remedial reading, 1971-72

Resume of remedial reading enrollment by schools, grades, teachers involved and groups taken care of by resources, 1971-72

Resume of reading progress of remedial reading pupils by resource, 1971-72

Reading situation in the district 1971-72

Check list on oral reading, 3rd to 6th grades

Analysis of oral reading test by paragraphs, 1971-72

Classification of students by levels, August 1971

Tabulation of phoneme tests, August 1971

Tabulation of silent reading tests to pupils who have overcome phonetic deficiencies, February 1972

Oral reading tests, April 1972

Analysis of phoneme tests, 1971-72

Oral reading tests, April, 1972

Silent reading tests (pupils who overcame reading deficiencies) February 1972

Tests on phonemes, January 1972

Analysis of tests on phonemes, April 1972

Tests on phonemes, August 1971

Phoneme tests, April 1972

5. Other documents examined from the three years of the project

Comparative table showing minimum number of dropout pupils in urban and rural junior and senior high for 1970-71-72

Same document as above on rural and urban elementary school

Dropouts, not transfers, at secondary and elementary school levels 1968-69,69-70,70-71

Student attendance in remedial reading by year, 90% retention. This was given by schools.

Enrollment and number of teachers by schools and nuclei, 1969-70. 70-71,71-72

Report on planning process, Title III

Statistical report on itinerant resources, including music, art, physical education and library

Comparative chart on dropouts

Resume of dropouts during 1968-69, 69-70,70-71

Comparative resume showing progress in academic achievement on the basis of an enrollment sample from those in remedial reading from 1969 to 1972

List of materials produced in the project

Cost-analysis report

V. Results of validation

A. Identified achievements that, on validation, prove transferable

1. The Validation Committee confirmed the fact that the idea of itinerant services is a possible solution to a lack of personnel, physical plant and unequal educational opportunities for pupils in the rural zone. This statement is supported by the following data :

a. the itinerant concept makes it possible to take care of groups of pupils with reading deficiencies by highly qualified resource teachers. In no other way could this pupils enjoy this service because of the area and distance. In the first year 316 pupils received the service, in the second enrollment rose to 325 and in third 216 were enrolled. Note that enrollment dropped by 33% because of the increased number placed in their proper reading level. Analysis of documents presented by the district showed, there was a significant reduction in reading deficiencies in the clientele attended.

As for student improvement, the district has a series of progress reports and statistical information from the initial diagnosis to the final, individual evaluation in each case that allows us to conclude that the itinerant concept has been a really significant success in the district.

b. In addition to the remedial reading program in Spanish, curriculum enrichment was, for the first time, introduced in a systematic, programmed form in art, music, physical education, library services and use of educational technology for pupils in the rural zone. The transportation services provided in the project has made possible the movement of resources to the different schoolscovered in the project. These school nuclei are located in the rural zone, mostly in socio-economically and culturally deprived areas.

(See Appendix I-A, where the work itinerary of the resoruces, as well as a comparative chart showing improvement in pupil achievement in reading. The list of documents includes other reports on this aspect.)

Interviews with parents, pupils and teachers indicate the project has contributed to a great degree to better attendance, reduction in failures and dropouts and toward a better school attitude on the part of the pupils. Se Appendix I-B.

A study of documents related to this aspect confirms what the interviewees stated, as there are a series of reports along this line. See Appendix I-C.

The improvement in the physical environment, effected in the school plants through the services of the itinerant counselors to nuclei never before having had these resources, contributed positively to the changed attitude of teachers, parents and pupils toward the school. This was confirmed by persons interviewed.

In their visits to the different nuclei participating in the project, members of the Validation Committee could see that the differences in educational opportunities between urban and rural zones had been significantly reduced.

2. Another achievement that, on validation, proves to be transferable is the type of inservice training offered to regular teachers in the project.

a. a procedure of systematic planning between the resource and the regular teacher as to procedures and techniques to be developed in the classes.

b. the production and use of materials of a suitable kind to take care of specific reading deficiencies of the pupils.

c. training for regular teachers in proper use of educational technology.

d. direct interaction between the resource, the regular teacher and the school principal made it possible to carry out inservice training while performing regular teaching duties.

The Validation Committee through its visits to the different schools and through interviews with resource and regular teachers could confirm the professional improvement of teachers in the project. Many teachers whose professional preparation was limited and were only provisional stated that through taking part in the project they had attained a much better professional attitude and now had much more self confidence in their teaching. (See Appendices I-D and I-E)

B. Cost analysis (See Appendix III)

VI. Recommendations and general conclusions

A. Recommendations

The Validation Committee recommends

1. a careful study of the itinerant concept for the purpose of deciding on

the possibility of using it with available resources in other districts in a similar form as now being used in the project and/or considering other programs and services.

2. an analysis of the possibility of implementing an inservice training procedure similar to that used in the project.
3. considering the possibility of reproducing, in part or completely, the materials prepared in the Ciales Demonstration District.
4. a mobile unit for library services be provided those districts having similar educational problems as Ciales.
5. control groups be organized from the very beginning of any project.
6. the evaluation and validation procedures be structured jointly from the beginning of every project and throughout its development.

B. Conclusions in general

The Validation Committee believes the itinerant concept as an inservice training procedure can be transferred to any other district with conditions similar to those of the Ciales district for adoption or adaptation in part or completely. (See Appendix II)

APPENDIX 1 - A

As for achievements in this aspect of the project, we observe in Talbes #1 and #2, 1970-71, that :

1. comparing progress in phonetic levels, August 1970 - January 1971, it is notable that 124 of the 295 pupils overcame all their phonetic deficiencies.

2. the 11 pupils who had not overcome all deficiencies had progressed one or two levels.

3. the 92% of the pupils in the reading program had improved their skills, progressing one, two or three reading levels
    - a. 29% had increased by two levels (85) from August 1971
    - b. 45% (131) had progressed one level
    - c. 18% improved within the same level
    - d. 8% showed no improvement at all

4. of the 26 pupils showing no progress, 15 were found to have learning limitations when given psychometric tests.

TABLE # 1

Comparative table on reading progress in phonetic level by pupils in remedial reading.

Mat. Total	0	I	II	III	IV	I	II	III	IV	Difficulty	Register
325	11	168	51	42	53	40	21	45	65	124	295

TABLE # 2

Resume of Situation - Remedial reading, May 1971 Reading levels.

Enrollment			Improved Reading				Reading Local achieved					
Original	N	Total	Propped	Active	No.	%	2	1	Improved with the same level	None at all	% Attendance	% Retention
282	43	325	30	295	269	92	86	131	52	26	88%	94%

TABLE # 3

Table showing number and percent of students below grade level in reading in 3rd to 6th grades :

1969 - 1970

Grade	Enrollment	Number of students	%
III	540	468	87%
IV	519	348	67%
V	446	201	22%
VI	391	148	38%
Totals	1,896	1,165	61%

1970 - 1971

Grade	Enrollment	Number of students	%
III	453	166	37%
IV	591	161	27%
V	550	71	13%
VI	482	38	8%
Totals	2,076	436	21%

1971 - 1972

Grade	Enrollment	Number of students	%
III	480	143	30%
IV	428	76	1%
V	544	57	1%
VI	501	20	.04%
Totals	1,953	296	15%

.833

1972 1973

	Grade	Enrollment	Number of students	%
	III	473	150	32%
	IV	461	57	21%
	V	466	37	8%
*	VI	500	0	0%
	Totals	1,880	244	12%

Comparative Table of dropouts, not transfers, in elementary rural and urban schools

1970 - 1971 and 1971 - 1972

Nuclei	Zone	Enrollment	No. of dropouts	Enrollment	No. of dropouts
Francisco Coira	U	467	38	437	30
Horace Mann	U	337	8	346	11
Cordillera	R	387	27	352	7
Cialitos	R	368	17	343	12
Jaguas	R	484	29	439	25
Pesa S.U.	R	315	10	306	16
Frontón S.U.	R	365	8	336	11
Pozas	R	428	27	404	7
Divisoria	R	105	2	79	5
Totals		3,256	166	3,042	124
Retention Desertion		95% 5%			

Student Dropouts from Elementary School, rural and urban, in Ciales and Cause

1971 - 1972

		Causes of Dropout																
Nuclei	Zone	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
S. U. Frontón	R	9				2					3					5		19
Cialitos	R	6				1		7			3							17
Frco. Coira	U	11				6		10			7	1	1		1			37
Horace Mann	U	4				3					5		1			2		15
Pozas	R					5		3										8
Cordillera	R	4						8								1		14
Jaguas	R	3				11		1			15							30
S.U.Pesa	R					1		4			9					1		15
Divisoria	R	5				3					1					1		10
Totals		42				32		33			43	1	2		1	11		165

Student dropouts from Senior and Junior High Schools, Rural and Urban, in Ciales and Causes

Schools	Zone	Causes of Dropouts															Total
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
S. U. Pesas	R			5	2	9					6					4	26
S. U. Frontón		4		1	1	2		1					2				11
Pozas	R	2		1	1	1											5
Ernesto Valderas	U	5			2	35		1			14		2	1	1	1	62
Juan Ríos Serpa	U	4		14	5	21		2			5		12		4	4	71
TOTALS		15		21	11	68		4			25		16	1	5	9	175

Causes for the greatest number of dropouts, as shown in the tables, are the following :

Elementary School

B 8 Family problems

B 10 Sickness

B 13 Left for the states

Secondary School

B 8 Family problems (greatest number of dropouts)

B 13 Left for the states

B 8 Received permission to work

B 7 Went to work without permission

B 15 Married

Total of pupils transfering to other districts 57

APPENDIX 1-C

RESUME - FINAL REPORT PHYSICAL EDUCATION

1971 - 1972

May 1972

No. of games taughth by resource	126 games
Films, diapositives and transparencies used in the Physical Education class	19 films
Activities in which pupils took part	Field day Competition with other schools
Equipment and materials provided by the resource	gloves, balls, ropes, bats, shoes, indoor games, jacks, basket - balls, baskets.
Profesional Capacity	Techniques for teaching games Learning of new games
Gains	school retention greater interest on students less absences better communication between students and teachers follow directions skills development better understanding of pupils

APPENDIX 1-C

ITINERANCY - PHYSICAL EDUCATION

1971- 1972

	Monday	Tuesday	Wednesday	Thursday	Friday
First Week	S.U. Pesa	Pozas	Cialitos Portón Cialitos Centros T. Negro Abajo	S.U. Frontón	Santa Clara P. Parcela
Second Week	Cordillera	Cumbre Puente	Pozas	Chayote Ferrer Divisoria	Cialitos Cruces
Third Week	S.U. Pesa	S.U. Pesa	C. Portón C. Portón Toro Negro Abajo	S.U. Frontón	Santa Clara Parcelas
Fourth Week	Cordillera	A.M. Cumbre Yúnez P.M. Free	Pozas	Chayote Ferrer Divisoria	Cialitos Cruces

Resource

Service Coordinator

Assistant Superintendent

APPENDIX 1-C

ITINERANT LIBRARY SERVICES

ITINERARY

1971 - 1972

First Week	Cialitos Portón Cialitos Centro	Pozas Llanadas Pozas Manicaboa	S.U. Frontón Frontón Sabana	Coira	S. U. Pesa Pesa Parcelas
Second Week	Cordillera Cumbre Puente	Divisoria Chayote Ferrer	Cialitos Cruces Frontón Yunez	Jaguas Santa Clara	Nuestra Señora del Rosario Prepare materials and clerical work
Third Week	Cialitos Portón Cialitos Centro Toro Negro Abajo	Pozas Llanada Pozas Manicaboa	S.U. Frontón Frontón Sabana	Coira	S. U. Pesa Pesas Parcela
Fourth Week	Cordillera Cumbre Puente	Divisoria Chayote Ferrer	Cialitos Cruces Frontón Yunez	Jaguas Santa Clara	Nuestra Señora del Rosario Prepare Materials and clerical work

The reading situation in the nuclei of Pozas, Cialitos Portón and Divisoria at the end of the year was as follows :

Pozas - of a total of 65 pupils

96% improved in reading

4% showed no improvement

Cialitos Portón - of a total of 48 pupils

93% improved in reading

7% showed no imporvement

Divisoria - of a total of 19 pupils

95% improved in reading

5% showed no improvement

APPENDIX 1-C

RESUME - REPORT BY REMEDIAL READING TEACHERS

1971 - 1972 May 1972

Enrollment - Remedial reading 296 pupils, 10 dropouts or transfers

Evaluation means used	Interviews with parents	13
	Letters to parents	2 Report on test results
	Visits to parents	4
	Meetings with parents	2
Materials provided by the resource	Cards	Books
	Vertical projector	Lessons on transparencie
	Filmstrips	Carrousel
	Opaque projector	Films
	Screen	Picture
	Posters	Posterstand
	Tapes	Room games
	Mimeograph work	Records
	Feltgraph	Movie projector
Professional training given teachers	Techniques for teaching reading	
	Methods of evaluation	Reading diagnosis
	Use of audiovisual equipment	Grouping
	Prepare materials	Individualization
Recommendations by teachers for improving this aspect of the project	Continue help from the resource Continue providing audiovisual equipment Provide more time for work in remedial reading if the resource is not present Provide materials Help from the resource from the first grade Better report on qualifications	

APPENDIX 1-C

RESUME REPORT ON MUSIC SUBMITTED BY TEACHERS

1971 - 1972

May 1972

Number of dances taught	75 folk dances
Songs taught	75 songs
Films, diapositives, transparencies used	14 films
Equipment and material provided by the resource	Records, record players, booklets of songs, music manual, tapes, pictures, filmstrips, tape recorder
Professional training given teachers	1. Techniques for teaching dances and songs 2. Integrating music classes into other subjects 3. Dances that can be taught at elementary level
Achievements	1. Pupil interest 2. Pupil socializing 3. Better conduct 4. Knowledge of needs of the pupils 5. School retention
Activities in which pupils took part	Local dance recital Local folk dance recital Fine Arts Festival Library Week program School activities

Some opinions from the teachers, resources and principals interviewed:

- I feel more confident and better prepared to help my fellow teachers in whatever school I may be assigned.
- The professional improvement I have made is because of the project.
- We have succeeded in working successfully in teams.
- We can work without the help of the human resources but prepared audiovisual materials and equipment are indispensible.
- As a resource, I have noticed the attitude of the teachers toward followup in physical education, art and music has improved. They feel more confident and to it with more interest, regardless of sex.
- I have a better understanding of my pupils and can offer them more help.
- The use of educational technology (audiovisual) had made it easier to do individualized teaching.

Some opinions expressed in interviews.

A. Parents :

- My daughter doesn't like to be absent. When I have to go to town and she has to stay home to take care of the children, she cries to go to school.
- My son wants to go even when he's sick.
- I see my children happier.
- My children are learning so very much that now I can't help them.
- My children have better grades.
- These "new programs" of physical education, art and music are helping the pupils to develop physically and mentally. When I went to school there, we didn't have such things. I don't want them taken away.
- My children are more sociable and like to take part in activities.
- As president of the Parents Council, I can affirm that all the parents think this program has been very helpful to the children.
- Everybody in our house reads the books the children bring from the bus (library).
- They are very interested in going to school and at home they dance and sing the songs they are taught at school.
- Carlos is doing better every day. He is weakest in mathematics.

B. Teachers and principals

- Before, the programs were more rigid. Now we like to teaches them, because of the orientation we have received.

- When a teacher is absent, the children voluntarily go to the classroom of another teacher.
- Absences and dropouts by pupils have been reduced.
- The pupils feel better because they are not separated from the group.
- Besides the attention to reading, the project has helped to improve the human relations and sociability of the pupils.

C. Pupils

- I like school better because it is more interesting, because they teach dancing and because I am learning.
- In the bus we sing songs the teacher has taught us.
- I don't like to be absent.
- I enjoy it more
- The teachers help us a great deal
- They show us films
- Now we have new books

APPENDIX 2

VALIDATION PROCESS

Check Sheet

Title : Itinerant teaching and special services for socio-culturally deprived areas.

District : Ciales Date : January 11, 1973

I. Indicate by a check mark in the proper column your rating of each area according to the scale :

0- Nothing at all
1- Unsatisfactory
2- Satisfactory
3- Outstanding
4- Excellent

AREAS	0	1	2	3	4
1. The strategies used in the project contribute to solve problem(s) identified in the study of needs				X	
2. The project presents evidence to show the operational objectives were effectively reached				X	
3. The project presents evidence to show the instruments used provide objective and reliable information					X
4. The project presents an analysis of cost-effectiveness that reflects a relationship between the costs and the performance of participants				X	
5. Analysis of cost-effectiveness indicates the project is practical (The money spent is justified by the product)				X	

AREAS	0	1	2	3	4
6. The project can be observed both visually and communicably					X
7. The project has concept or practices obviously original, unusual and exemplary					X
8. The project offers innovative procedures, techniques and practices that can be disseminated					X
9. The project has made a significant contribution to the educational system				X	

APPENDIX 3

Project #8 - Cost Analysis

1969 - 1970

ITEM	FEDERAL	STATE	TOTAL
I. Personnel			
A. Instructional	20,651.57	5,640.00	26,291.57
Cooperating teacher	---------	51,808.00	51,808.00
Classified	7,711.69	--------	7,711.69
Tutors	3,060.00	--------	3,060.00
Contract	1,818.55	--------	1,818.55
Part-time	5,425.44	--------	5,425.44
II. Fringe benefits	3,347.86	6,836.31	10,184.17
III. Equipment			
Title III	458.22	---------	458.22
CRE	--------	---------	----------
IV. Physical Plant	--------	---------	----------
V. Materials			
Title III	2,609.57	---------	2,609.57
CRE	5.00	---------	5.00
D.I.P.	---------	---------	----------
VI. Transportation	1,485.00	---------	1,485.00
VII. Perdiem and Mileage	391.02	---------	391.02
TOTAL	$46,963.92	$64,284.31	$111,248.23

1970 - 1971

ITEM	FEDERAL	STATE	TOTAL
I. Personnel			
A. Instructional	32,620.92	7,773.32	40,394.24
Cooperating teacher	---------	81,576.00	81,576.00
Classified	13,951.02	---------	13,951.02
Tutors	6,750.00	---------	6,750.00
Contract	4,454.00	---------	4,454.00
Part-time	9,339.38	---------	9,339.38
II. Fringe benefits	5,605.35	10,632.56	16,237.91
III. Equipment			
Title III	4,858.17	---------	4,858.17
CRE	---------	---------	
IV. Physical Plant	---------	1,400.00	1,400.00
V Materials			
Title III	2,850.69	15.62	2,866.31
CRE	661.00	---------	661.00
D.I.P.	---------	---------	
VI. Transportation	2,609.64	---------	2,609.64
VII. Perdiem and Mileage	349.26	---------	249.26
TOTAL	$84,049.43	$101,397.50	$185,446.93

.851

1971 - 1972

ITEM	FEDERAL	STATE	TOTAL
I. Personnel			
A. Instructional	35,753.30	7,948.05	43,701.35
Cooperating teacher	---------	98,860.00	98,860.00
Classified	17,150.00	---------	17,150.00
Tutors	7,920.00	---------	7,920.00
Contract	5,748.00	---------	5,748.00
Part-time	9,765.85	---------	9,765.85
II. Fringe benefits	7,111.20	14,421.09	21,532.29
III. Equipment			
Title III	4,310.03	---------	4,310.03
CRE	---------	---------	
IV. Physical Plant	---------	1,400.00	
V. Materials			
Title III	5,146.42	31.25	5,177.67
CRE	627.35	---------	627.35
D.I.P.	---------	35.00	35.00
VI. Transportation	2,512.64	---------	2,512.64
VII. Perdiem and Mileage	225.36	---------	225.36
TOTAL	$96,270.15	$122,695.39	$218,965.54

During 1970-71

3,860 pupils received the impact of five additional resources in the areas of music, art, physical education, Spanish and library for approximately 168 hours.

This breaks down as follows :

Music	15 hours
Art	15 hours
Physical Educ.	108 hours
Library	15 hours
Total	168 hours/year

In making a cost analysis of the project for 1970-71, we find it cost the project approximately $213.00 to promote a student from one reading level to another.